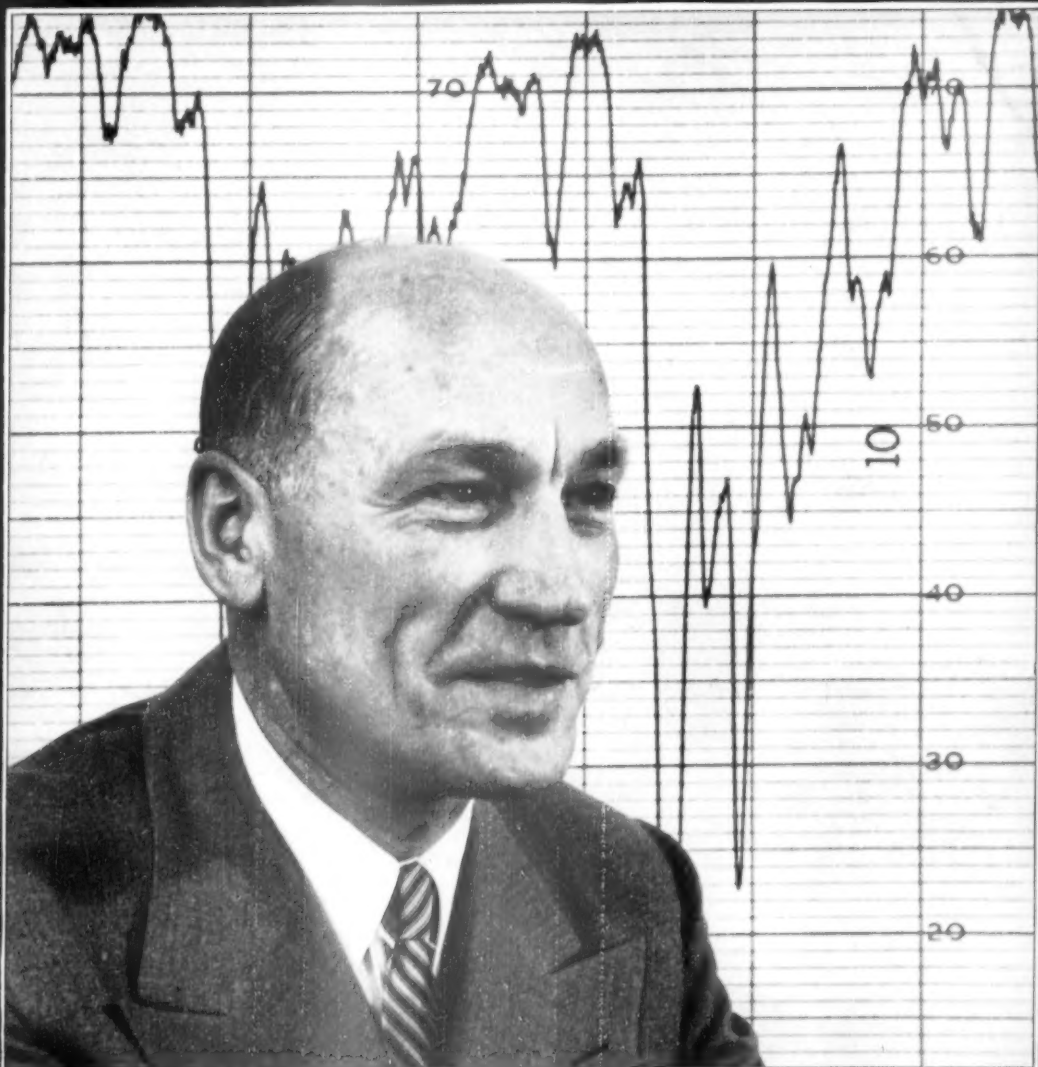


# BUSINESS WEEK

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## Top Men's Pay

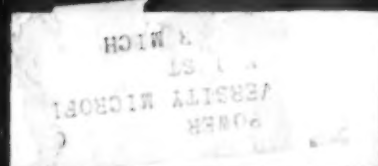
A LINE-UP OF  
EXECUTIVES' EARNINGS  
PAGE 64



Beckman of Beckman Instruments: Automation is his market (page 178)

A MCGRAW-HILL PUBLICATION

MAY 22, 1954

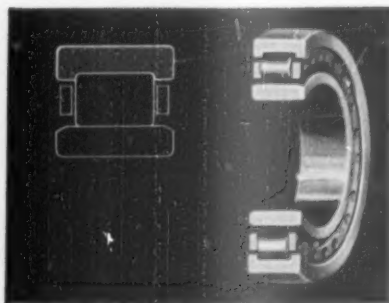




## Built-in durability cuts costly down-time!

They're tough and rugged, these mighty machines—built to do in a day what used to take weeks. And to stand up under the punishing demands of day-to-day operation, equipment like this requires durable, dependable bearings—Bower roller bearings. ☆ Exclusive Bower design features like those shown at right, coupled with painstaking quality control, make these bearings last longer, require less maintenance, perform better. In fact, Bower bearings have thoroughly *proved* themselves, under the most rugged conditions, in virtually every make of heavy-duty equipment! ☆ Whatever your product, if it uses bearings, specify Bower! A Bower engineer can show you a complete line of tapered, straight and journal roller bearings for every field of transportation and industry.

BOWER ROLLER BEARING COMPANY • DETROIT 14, MICHIGAN



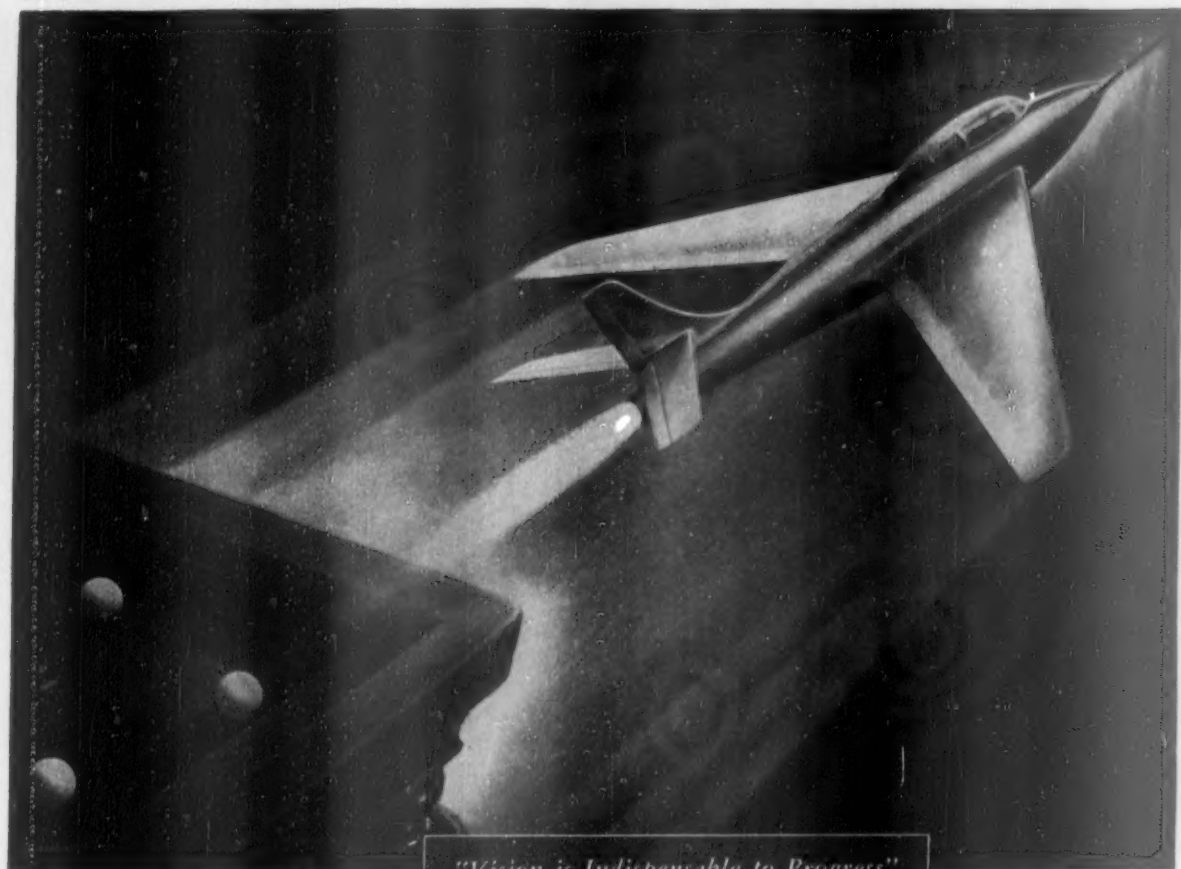
**TWO-LIP RACE INCREASES RIGIDITY**

Two parallel shoulders made integral with the outer race, as shown in red above, increase rigidity and durability—keep rollers in proper alignment. Precision-ground rollers and races give quieter, smoother operation.



# BOWER

ROLLER BEARINGS



*"Vision is Indispensable to Progress"*

## From the billiard ball of yesterday . . . streaks the jet plane of tomorrow

An ivory shortage in 1868 inspired a young printer, John Wesley Hyatt, to devise a new material for making billiard balls. He evolved a composition called celluloid . . . and the U.S. plastics industry was born.

Starting with the manufacture of collars, cuffs and combs, the industry took its second major step in 1909, when Dr. Leo Baekeland produced the first phenolic, Bakelite, which could be cast, formed under heat and pressure, and laminated.

In the next 17 years, cold molded and casein plastics were developed. Then in quickening tempo came thermoplastic molding and a whole group of new plastic raw materials: the acrylics, cellulose, melamines and ureas, nylon, polyesters, polyethylenes, polystyrenes, saran and vinyls, and others.

Today, plastics are being combined to produce almost any property desired in finished products—

lightness, strength, endurance, contour, wide range of colors, adaptation to mass production methods and, often, lower cost. Some 5,000 U.S. companies—manufacturers, processors, fabricators and finishers, employing 200,000 workers—make plastics their main business.

From tea cups to irrigation pipes, from clothing and luggage to swimming pools, from toys to bullet-proof vests, plastics have become so essential to modern living that courses in Plastics are now given by 71 colleges.

Along with an annual output topping \$1½ billion in retail sales, goes constant research to create new and

improved products for civilian, industrial and military use. Among them: foam-plastic and glass-reinforced plastic products for home and office; strong, beautiful sports bodies for automobiles. Astonishing advances in jet plane manufacture are being hastened by use of plastic components that decrease weight, increase stamina and safety at supersonic speeds. The F-84 Thunderjet has 225 reinforced plastic parts.

The great plastics industry, operating in the atmosphere of a free competitive business system, promises to enrich the lives of each succeeding generation in countless ways.

## BANKERS TRUST COMPANY

16 WALL STREET, NEW YORK 15, N. Y.

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION





## "Is it for ME?"

You kind of hope it is—for good news and good times often come your way by telephone.

Maybe it's a date for sister Sue. Or an important business call for Dad. Or Bill asking if Jimmie can go to the movies. Or Grandma calling Mother

to find out if things are all right. And everything is more likely to be all right when there's a telephone in the home.

In many, many ways, the telephone is a real friend of the family. And the cost is small—just pennies a call.

### BELL TELEPHONE SYSTEM

LOCAL to serve the community. NATIONWIDE to serve the nation.



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## ADVERTISING & BUSINESS MANAGER Herman C. Sturm

*"I thought I'd need  
a genie to find a  
subcontractor for  
those parts..."*



*until an officer of the local Marine Midland bank in Jamestown—the Chautauqua National Bank and Trust Company—put us in touch with a plant in their area that could help us meet our production deadline."*

Timely help on similar problems is often obtainable in New York State when The Marine Midland Trust Company of New York is your bank.

In 9 principal trading regions of New York State, affiliated Marine Midland banks have 126 offices in 61 towns and cities. Each officer knows his own area and the people in it as only a local resident can. Let us show you how this "next-door-neighbor" knowledge can be useful to your business.

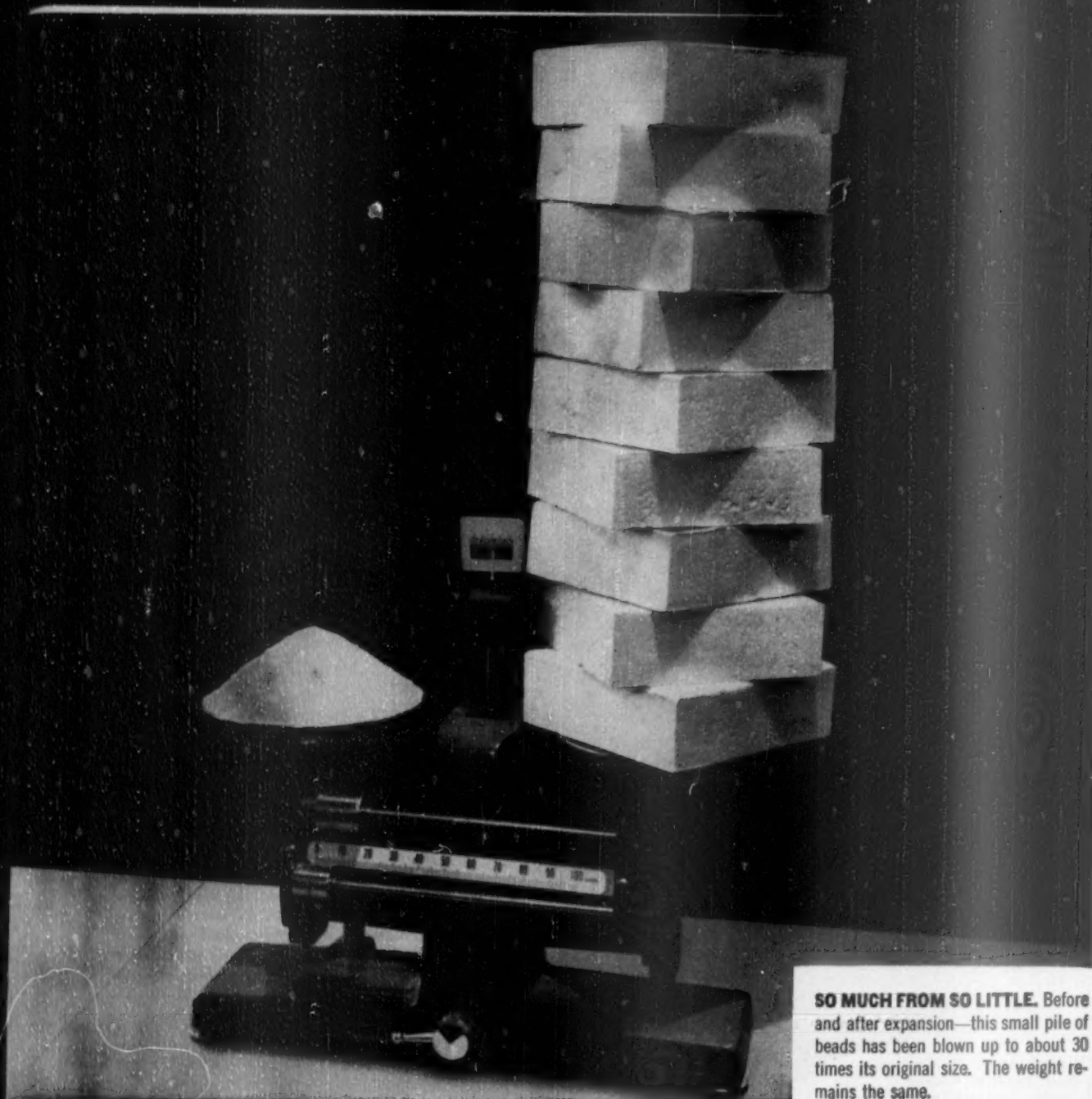
The  
**MARINE MIDLAND  
TRUST COMPANY**  
*of New York*

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Member Federal Deposit Insurance Corporation

BUSINESS WEEK • MAY 22 • NUMBER 1290

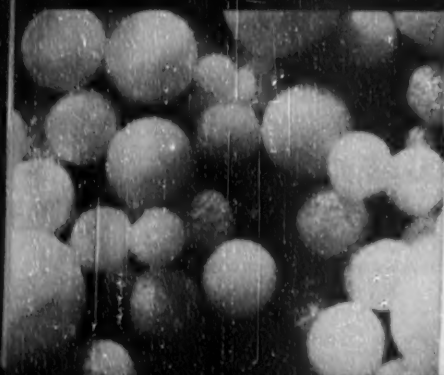
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**SO MUCH FROM SO LITTLE.** Before and after expansion—this small pile of beads has been blown up to about 30 times its original size. The weight remains the same.

**SEE THOSE BEADS.** This picture shows the molded plastic beads that expand to form a variety of shapes and sizes.



**POP GOES THE POLYSTYRENE.** A simple molding machine, Koppers Expandable Polystyrene and a little heat are all that is needed to make any shape you need. The smooth, white surface of the foam does not require finishing.



**PLAIN OR FANCY.** Expandable polystyrene is used to fill intricate molds. Molded pieces can be painted if desired.



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# Amazing new Polystyrene can be expanded to shape

## Koppers Expandable Polystyrene makes tough foam that insulates, floats

**N**EW Koppers Expandable Polystyrene looks like granulated sugar. But, when a handful of it is poured into a simple mold and heated, the polystyrene rises to fill the entire cavity. It forms millions of small plastic cells, all joined together to make a tough, strong foam. Open the mold and you have a foamed polystyrene piece, smooth and light and in the shape and density desired.

By controlling the *quantity* of polystyrene placed in the mold, the density and physical properties of the expanded plastic may be varied as desired. The heavier material is stronger because it has a tighter network of small, thick walled plastic cells. Lightweight products have larger cells, and

a higher insulating value.

Koppers Expandable Polystyrene can be molded into a variety of shapes for low temperature insulation — refrigerators, freezers, air conditioners and piping. Also, this new polystyrene is just the thing for life rafts, buoys, packaging, toys and displays. Use it in

products needing light weight, insulating properties, buoyancy, strength, smoothness, paintable surfaces, low water absorption, and precisely molded contours.

For more information about Koppers Expandable Polystyrene, fill out and mail the attached coupon.

Be sure to see  
this new  
Polystyrene  
at the Plastics  
Show—  
CLEVELAND, OHIO,  
JUNE 7 THRU 10.

Koppers Company, Inc.  
Dept. BW-5224, Chemical Division  
Pittsburgh 19, Pennsylvania

Please send me further information on Koppers  
Expandable Polystyrene ☐

Name.....

Address.....

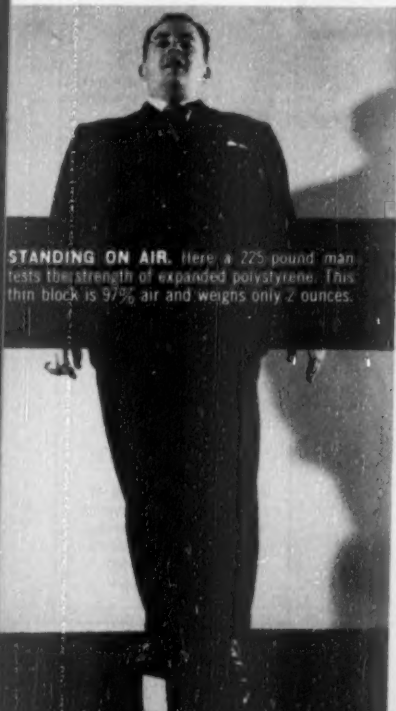
City..... State.....

*Koppers Plastics Make Many Products Better and Many Better Products Possible*



## Koppers Plastics

KOPPERS COMPANY, INC., Chemical Division, Dept. BW-5224, Pittsburgh 19, Pennsylvania  
SALES OFFICES: NEW YORK • BOSTON • PHILADELPHIA • ATLANTA • CHICAGO • DETROIT • LOS ANGELES



**STANDING ON AIR.** Here, a 225 pound man tests the strength of expanded polystyrene. This thin block is 97% air and weighs only 2 ounces.

**IT FLOATS!** It's lighter than cork and absorbs almost no water.



**TRAPPED AIR TRAPS HEAT.** The millions of tiny individual cells in expanded polystyrene stop heat flow. New foam material can be used to insulate refrigerators and freezer rooms or sandwich panels as shown here.



# How to look at plant-site opportunities along 18 rivers right at your own desk

Check this list of Plant Location Factors to get the combination you need...



## WATER

Is water for processing important?

☐ IMPORTANT

AGE territory offers 18 rivers and abundant ground water for processing.



## POWER

Is power important to your operation?

☐ IMPORTANT

AGE is one of the largest, most modern private power systems in the world. It offers unlimited power, day and night, for any type of industrial operation.

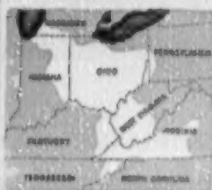


## LIVING CONDITIONS

Are living conditions important?

☐ IMPORTANT

AGE territory offers you 2300 communities, adequate housing, a wide range of living conditions to choose from.



## ACCESS TO MARKETS

Is nearness to markets important?

☐ IMPORTANT

The AGE System runs through the heart of industrial America—serving important manufacturing and population centers in Michigan, Indiana, Ohio, Kentucky, West Virginia, Virginia, Tennessee.



## MINERALS

Are certain minerals important?

☐ IMPORTANT

AGE offers an abundance of more than 20 important minerals, including:

- |                                    |                               |
|------------------------------------|-------------------------------|
| <input type="checkbox"/> COAL      | <input type="checkbox"/> IRON |
| <input type="checkbox"/> SALT      | <input type="checkbox"/> OIL  |
| <input type="checkbox"/> SAND      | <input type="checkbox"/> ZINC |
| <input type="checkbox"/> LEAD      | <input type="checkbox"/> GAS  |
| <input type="checkbox"/> MANGANESE |                               |



## RECREATION

Are recreational facilities an important consideration?

☐ IMPORTANT

The AGE territory offers excellent recreational facilities—good camping, proximity to National Parks, lakes and rivers, good fishing and hunting, modern highways, historical spots, high hills and deep valleys.



## LABOR

Do you need a specific type of labor?

☐ IMPORTANT

AGE territory includes a huge pool of the finest types of labor, both male and female:

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| <input type="checkbox"/> TECHNICAL  | <input type="checkbox"/> SKILLED   |
| <input type="checkbox"/> MECHANICAL | <input type="checkbox"/> UNSKILLED |



## FORESTRY

Are woods and other forest products important?

☐ IMPORTANT

There are thousands of square miles of forest in AGE territory including pulp woods and soft and hard woods for many uses.

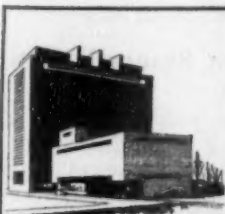
## If you are looking for a plant location...

...you can go a long way toward finding the river-site you need right on these pages. Study these 14 most important plant-site factors. Check those that apply to your own situation.

Then accept Mr. Davis's invitation below. He will set up a meeting for you at which available plant sites along our eighteen rivers can be discussed in detail—with particular reference to your own special requirements. In this way we can

save you considerable in money and executive time, as we have for many other organizations both large and small.

Experienced AGE plant-location engineers can usually handle all preliminaries without involving your organization. Your specific needs are thoroughly investigated and all available plant sites sized up against them. Details on only the best ones are then submitted for your examination.



### DISTRIBUTION FACILITIES

Are distribution facilities important?

☐ IMPORTANT

Excellent storage and warehouse facilities and other efficient aids to the movement and transfer of goods are available in AGE territory.

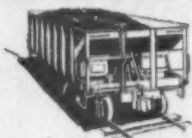


### REASONABLE TAX RATES

Is a favorable tax structure important?

☐ IMPORTANT

AGE territory offers a choice of favorable tax structures. Your special requirements will be carefully analyzed.



### FUEL

Is fuel important to your operation?

☐ IMPORTANT

Approximately 50% of the bituminous coal produced in the U. S. is mined along the AGE System. AGE territory also has many natural gas areas, and important oil and gas pipelines to tap from.

*For that just right plant site—Look to the American Gas and Electric area of industrial opportunity*

### OPERATING SUBSIDIARIES

APPALACHIAN ELECTRIC POWER COMPANY  
INDIANA & MICHIGAN ELECTRIC COMPANY  
KENTUCKY AND WEST VIRGINIA  
POWER COMPANY, INC.  
KINGSFORD UTILITIES, INC.  
THE OHIO POWER COMPANY  
WHEELING ELECTRIC COMPANY



### TRANSPORTATION

Is economical access to sources of raw materials and large markets an advantage to you?

☐ IMPORTANT

AGE offers a unique balance between raw materials and markets. It also offers 18 main line railroads, rivers, thousands of miles of modern highways, and leading airline facilities—assuring you the most advantageous position on transportation rates and delivered cost of your products.

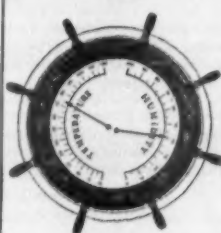


### ACCESS TO SEAPORTS AND LAKEPORTS

Is access to major seaports or lakeports an advantage to you?

☐ IMPORTANT

AGE can offer you easy access to 4 major Atlantic seaports and ports on 2 Great Lakes.



### CLIMATE

Are climatic conditions a factor in your business?

☐ IMPORTANT

The seven-state area served by the AGE System—stretching from Lake Michigan to the North Carolina border—offers a wide range of climatic conditions from which to choose the one that meets your requirements.

## MEMO

FROM THE MANAGER  
OF AREA DEVELOPMENT DIVISION  
AMERICAN GAS AND ELECTRIC COMPANY  
30 CHURCH ST., NEW YORK 6, N. Y.  
TEL. CORTLANDT 7-5920

To Executives of Expanding Industries:

If you will write, or call me, I'll be glad to arrange confidential conferences with executives familiar with the resources of our territory. They are experienced in briefing plant locations according to the needs of individual industries. There will be no obligation. All we have to sell is power, enough to meet the needs of all industries now located or that may want to locate on our lines because of the economic advantages the AGE area offers.

Sincerely yours,

*Lee L. Davis*

Lee L. Davis

#### TRANSPORTER

Operator-led electric truck for horizontal movement of all kinds...up to 10,000 lbs. capacity.



SKYLIFT

Trouble-free, heavy-duty electric fork lift...capacities 1,500 to 10,000 lbs.

**Only \$153 A DAY**  
**can cut your**  
**materials handling**  
**costs by**  
**50% or MORE!**

### **NOW** New "EARN-ITS-OWN-WAY" LEASE PLAN **eliminates capital investment...puts an AUTOMATIC** **Industrial Truck to work for you right away!**

Now, at last, it's as easy as renting a place of business for you to have the *cost-cutting* Automatic industrial truck that your materials handling needs! The new "EARN-ITS-OWN-WAY" Lease Plan puts an Automatic in your plant *without 1¢ capital investment*, and for as little as *\$1.53 a day!*

What's more—these thrifty Automatic trucks can actually pay for themselves... earning the modest lease cost, plus a sizeable profit as well. Automatic has on file actual case histories that show materials handling savings up to 50% or more.

Or if you prefer to *own* your Automatic Truck, there's an "Earn-Its-Own-Way" Finance Plan, that delivers your truck for a modest down payment and gives you from 6 to 36 months to pay off the balance.

Through an extremely flexible system of options, an "Earn-Its-Own-Way" Plan can be tailored to your specific needs.

#### LEASE PLAN

Model—complete with battery and charger	*Average daily cost of lease over 5 years	Average daily rental after lease expires
TRANSPORTER	\$1.53	14¢
SKYLIFT	5.43	45¢

\*The average figures are based on 5 year lease term (60 months), 25 operating days per month (300 days per year). You may have the option to purchase the equipment if you wish.

Don't postpone getting the cost-cutting Automatic truck that can mean *more savings* for you. Mail the coupon today for full information.

*Plans available in U.S.A. only.*

# Automatic

WORLD'S LARGEST EXCLUSIVE BUILDER  
OF ELECTRIC-DRIVEN INDUSTRIAL TRUCKS

93 W. 87th St., Dept. E-4  
Chicago 20, Illinois

Without obligation, please send me complete information on your new Earn-Its-Own-Way:

☐ Lease Plan  
☐ Budget Payment Plan

Company Name.....

By..... Title.....

Street.....

City..... Zone..... State.....

## READERS REPORT

### Staunton: The Birthplace

Dear Sir:

In the Mar. 6 issue of BUSINESS WEEK, on page 71, I note that you... stated: "City management is one of the world's youngest professions. Sumter, S. C., was the first city ever to hire a manager; the date: 1912."

... I wish to correct that statement and inform you that Staunton, Va., in 1908, was the very first city to adopt and put into operation the city manager form of municipal government. ...

WILLIAM A. GRUBERT

MAYOR  
CITY OF STAUNTON, VA.

### Cooperative Research Plan

Dear Sir:

Your article entitled College Research Is Not Enough [BW—Apr. 10, '54, p92] concludes that research sponsorship by large companies is the only alternative to the conduct of fundamental research in universities and large national laboratories. There is another alternative: Cooperative research programs sponsored by several small and medium-sized companies in particular industrial groupings.

In view of recent technological advances, the development of these programs is essential if the large companies are not to acquire such a competitive commercial advantage as to force out many smaller companies which cannot spend substantial research dollars. Also, projects of this type can serve as the nucleus of cooperative pooling arrangements which will allow smaller companies to compete for desirable government (and private) research and development contracts.

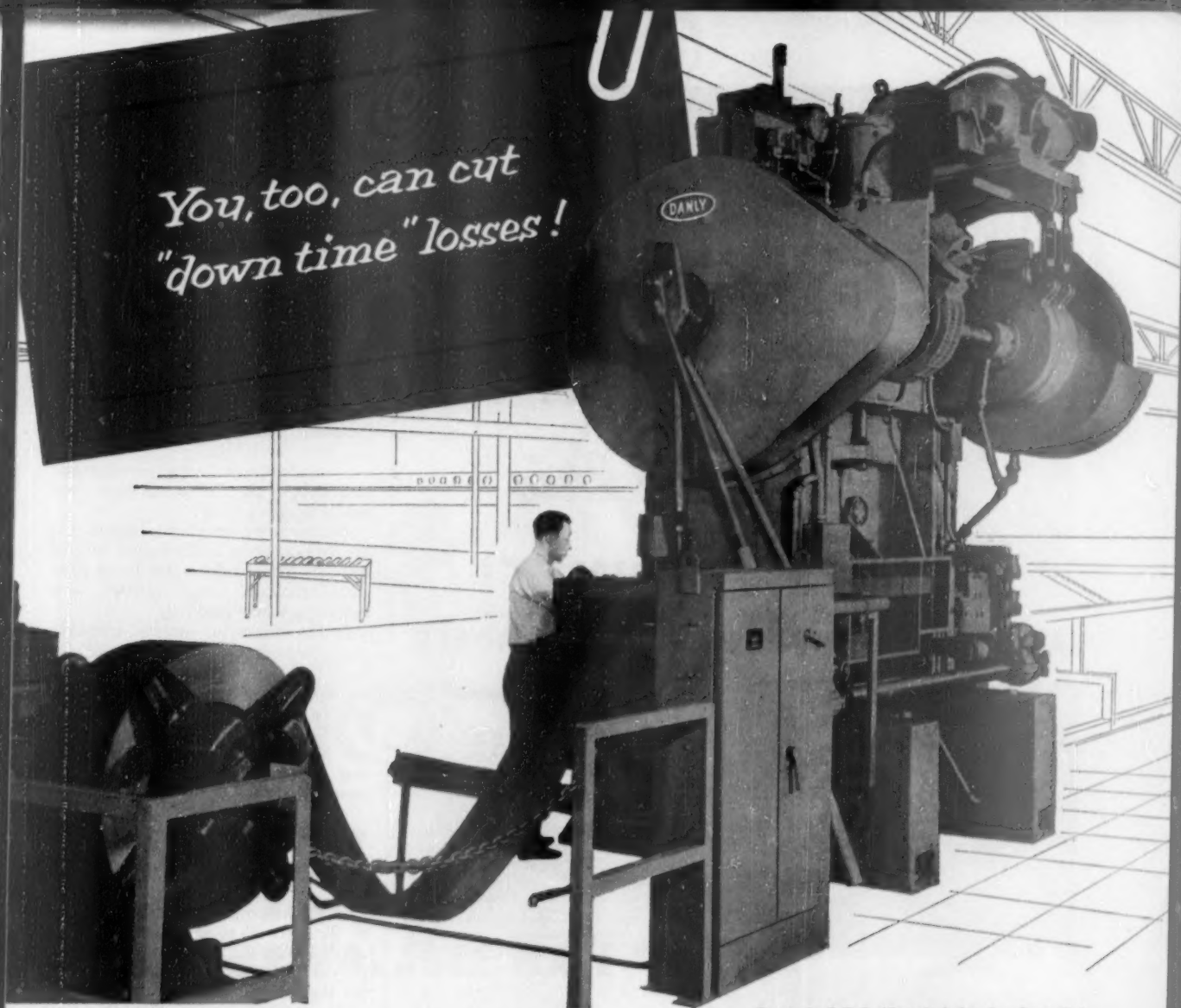
Such projects are now usually awarded to large firms having the necessary diverse technical management skills within their existing organizations; the combined resources of a few smaller companies may well be sufficiently comparable to allow increased competition for this sort of work. Many smaller companies may find that they are being paid for the opportunity to engage in research and development in new fields.

Methods of effecting workable cooperative research arrangements have been developed. Advantage should be taken of them.

MUNROE F. POFCHER  
POFCHER, SCHLUSSEL & KATCHER  
COUNSELLORS AT LAW  
NEW YORK, N. Y.

• A number of small companies banding together to carry out research would, of course, be another means of filling

*You, too, can cut  
"down time" losses!*



*Westinghouse Electric Corporation Averages  
45,000 Laminations per 8-Hour Shift on a*

## **DANLY PRESS**

This is the perfect setup for steady, uninterrupted production of transformer core laminations at Westinghouse... a clear, fenced-off working area... automatic feed, slug disposal and piece part delivery equipment... and a *Danly Autofeed Press!*

Running almost continuously at a stroking rate of 120 per minute, this 150-ton Danly Press stamps out an average of 45,000 laminations during an 8-hour shift! Since installation no maintenance has been required. Greater rigidity and precision of the Danly Press have given the expensive dies a longer lease on life, too... producing an estimated 750,000 pieces between grinds!

New production records like this are the reasons why management men are insisting on Danly Presses in leading stamping plants throughout the country.

### **DANLY MACHINE SPECIALTIES, INC.**

2100 South Laramie Avenue, Chicago 50, Illinois

**PROVED AGAIN... It costs less to run a DANLY PRESS!**

**Dynamic C B C (Counterbalancing Capacity)...**  
Engineered balancing of all moving parts under load plus special design of press and counterbalance capacity to meet specific job needs virtually eliminates "break-through" shock and "chucking"... makes press operation smoother, increases life of both press and dies.



MECHANICAL PRESSES... 50 to 3000 TONS  
SINGLE, DOUBLE, TRIPLE, ACTION  
AUTOFEED... UNDERDRIVE

If your manufacturing process involves high production and expensive dies, it will probably be worth your while to talk with a Danly Press Engineer. Call now—he will be glad to discuss your specific problems. There is no obligation for this service.

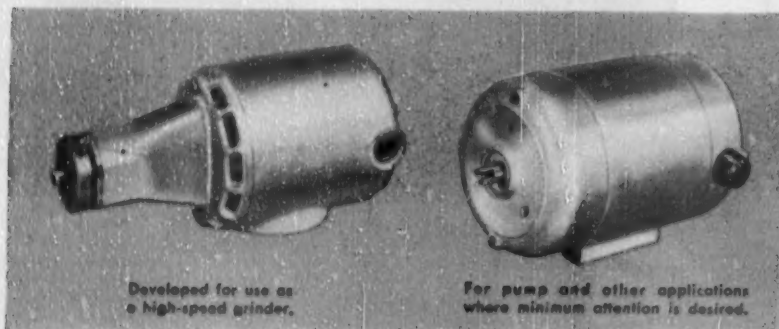


CHECK THE ADVANTAGES OF

**Lamb Electric**

SPECIAL APPLICATION FRACTIONAL HORSEPOWER MOTORS

AGAINST YOUR PRODUCT DESIGN GOALS



Are you looking for ways to improve appearance, reduce weight, decrease maintenance, and at the same time lower the cost of your product?

If you are, it will pay to consider the use of a Lamb Electric motor, *specially engineered* to provide exact electrical and mechanical requirements.

We shall welcome an opportunity to discuss the benefits of a Lamb Electric motor in terms of your product design goals.

**THE LAMB ELECTRIC COMPANY • KENT, OHIO**

In Canada: Lamb Electric — Division of Sangamo Company Ltd. — Leaside, Ontario



some of the scientific gaps. However, unless those companies are willing to establish permanent research facilities through trade associations, their efforts will still have some of the shortcomings inherent in much college research.

## Deposit Currency

Dear Sir:

The article By Check Only [BW—Apr. 24 '54, p. 70] sent my mind racing back about twenty years.

The Fort Worth National Bank, Fort Worth, Tex., discarded its cash payroll system and adopted the deposit currency payroll system. This was accomplished with no fuss or ado at the employee level.

I wonder how many management men caught the full implication contained in this article.

Our maturing civilization, having left the days of barter and payment in gold and . . . many transactions being completed without paper currency, now stands on a new threshold.

In the interest of national efficiency and economy the employer and the banker should actively seek to devise a method of handling the payroll without the cost of using individual payroll checks. Deposit currency, of course, will be the system. However, I doubt that one method will serve all employers and banks. . . .

HARTER PRICE

BONICIA, CALIF.

Dear Sir:

. . . I wish to protest against the implication contained in an article in the Apr. 24 issue . . . re the salary deposit checking accounts maintained by the First National Bank of Boston for their employees.

The article implies that the First National Bank of Boston was the first bank in our country to establish such a system. Such is not the case . . . for . . . the Seattle-First National Bank instituted this identical system back in January, 1953. Free printed checks are provided for the members of the staff, and there is no limit on the number of checks that may be written on employee checking accounts, without any service charge.

W. H. DuBois, Jr.

NORTH RICHLAND, WASH.

## Baby Sitting: Boom & Slump

Dear Sir:

At the April meeting of the Board of Directors of Thompson Bros. Services, BUSINESS WEEK was constructively criticized by the two senior partners and co-founders of the business that bears their name, George and Tommy Thompson.

Acting in my honorary capacity as

BUSINESS WEEK • May 22, 1954



## **Johns-Manville Announces**

### **A NEW NONCOMBUSTIBLE ASBESTOS MOVABLE WALL**

**Economical in cost . . .**

**Pleasing colors — Scratch and stain resistant**

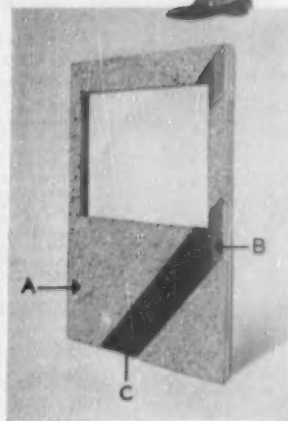
New Johns-Manville Class A Movable Walls offer you advantages never before combined in an asbestos movable wall. They are modestly priced. They are noncombustible. They have a textured, stippled finish in restful colors. They reduce maintenance and re-location costs to a new low.

Class A Movable Walls consist of a noncombustible all-mineral core with sturdy asbestos-cement surfaces. The finish is a tough, hard film many times thicker than on the usual movable partition. It is mar and scratch resistant . . . rejects stain and soil . . . can be easily washed and even scrubbed, if necessary. If damaged, it can be touched up inexpensively to look like new . . . and, unlike other types of factory-

finished partitions, can be repainted with ordinary paint.

Both flush and glazed partitions are available in ceiling high or free standing heights. Walls are erected complete with doors, door hardware, glass and trim. For best results, they are erected by Johns-Manville's own Construction Department. In this way every job, large or small, receives the benefit of Johns-Manville's undivided responsibility.

An estimate will convince you that the cost of J-M Movable Walls compares favorably with other types of wall construction. For details, write Johns-Manville, Dept. BW, Box 158, New York 16, N. Y. In Canada write 199 Bay Street, Toronto 1, Ontario.



**TYPICAL PANEL CONSTRUCTION**

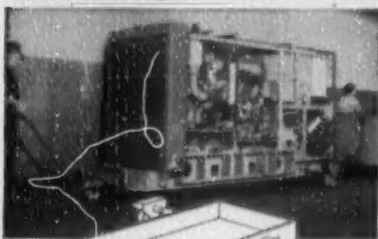
- A** Noncombustible asbestos-cement surfaces.
- B** Generous reinforcing for added strength.
- C** Noncombustible all-mineral insulating core.



# **Johns-Manville**

# **Faultless** CASTER MATERIALS HANDLING FACTS

**CATERPILLAR TRACTOR Co.'s Peoria plant  
moves 11 ton engine on Faultless Casters**

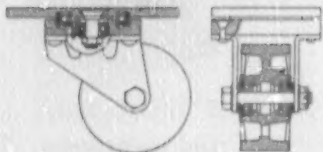


Method of moving a 22,000 lb. portable self-contained Diesel-electric set between assembly stations, is shown at Caterpillar Tractor Co. Brackets hold one Faultless swivel-plate caster, number 1306-10 and two Faultless special alloy, roller bearing wheels. Engine is guided with lever arm temporarily attached to axle bolt of the swivel caster. When the Diesel-electric assembly is completed, the brackets fastened to the swivel caster and the wheels are easily removed from the engine's permanent stand and used on new units. Several engines are in production simultaneously.

With such massive production units to be transported, Caterpillar engineers chose Faultless Casters because their rugged dimensions and heavy duty bearings assure safe, dependable daily service. The engine frame serves as a work stand and mobile dolly, resulting in the advantages of minimum handling, economy in costly floor space and free maneuverability. Faultless Caster distributors can help you solve materials handling problems in your own plant. Ask for their suggestions, no obligation.



**SERIES 1300**  
A combination of Timken roller bearings and precision ball bearings absorb strains in traveling over obstacles, like rail tracks in the flooring. Even under 11 ton loads these Series 1300 Casters swivel easily and roll smoothly.



Each month the solution to a real materials handling problem is fully presented in a free, handy size folder. To get the complete story on the Caterpillar caster application mentioned above, write on company letterhead.

**FAULTLESS CASTER CORPORATION, EVANSVILLE 7, IND.**

Making Casters for more than 64 years.  
Branches in Birmingham, Chicago • See phone directory

treasurer and director . . . it occurred to me that these young businessmen, now aged 12 and 15 respectively, might have touched on a point of interest, locally, that in the past has been overlooked by BUSINESS WEEK. . . .

. . . Thompson Bros. Services . . . was organized to perform miscellaneous errands for Greenwich housewives and forgetful spouses. . . .

The young men feel that their errand service truly reflects the effect of either a strong or weak economy in a number of ways heretofore not used as a study basis.

For instance, their records clearly indicate that when our economy is strong and personal income up, families are inclined to pay for such services as: walking the dog, shining father's shoes, fetching ice cream for dessert, running to the drugstore for cigarettes . . . or prescriptions, and baby sitting hits a new high during a strong economy.

However, in a period such as we are passing through, their books reflect that father must be shining his own, the family walks their own dog more, less ice cream appears to be consumed and . . . baby sitting hits a low demand. . . .

Baby sitting and related errands have become big business in the aggregate throughout the country, and the young partners feel that if ever a survey could be made of the subject, BUSINESS WEEK would be amazed at the results.

U. T. THOMPSON

NEW YORK, N. Y.

• We extend best wishes for the continued success of Thompson Bros. Services.

## **Office Space in Columbus**

Dear Sir:

We wish to call your attention to a misstatement of fact in your issue of Mar. 20, on page 140. . . .

You stated: "Class A office space in the city of Columbus rents for \$4.00 to \$6.00 per sq. ft. per year."

The fact is that first-class office space in Columbus rents from \$2.75 to \$4.00 per sq. ft. per year. In proof of this statement, we have obtained rent schedules from five of the newest, largest and finest office buildings in the city. The average rent in Building 1 is \$3.85; Building 2 \$3.65; Buildings 3 and 4 \$3.50, and Building 5 \$3.00.

LEE H. WEARS

COLUMBUS ASSN. OF BUILDING OWNERS  
& MANAGERS  
COLUMBUS, OHIO

• We should have said that rentals of any newly constructed downtown office space would range from \$4.00 to \$6.00 per sq. ft., building costs being what they are.

## **The Merchants of Venice**

Dear Sir:

. . . Your story, Another Florida Land Boom [BW—Apr. 3 '54, p. 56], contains [this] statement: "The Venice Area Chamber of Commerce, actually, is merely an adjunct of the real estate firm that's selling lots. It has no connection whatever with the Venice Chamber of Commerce, which is the official organization of the businessmen of Venice."

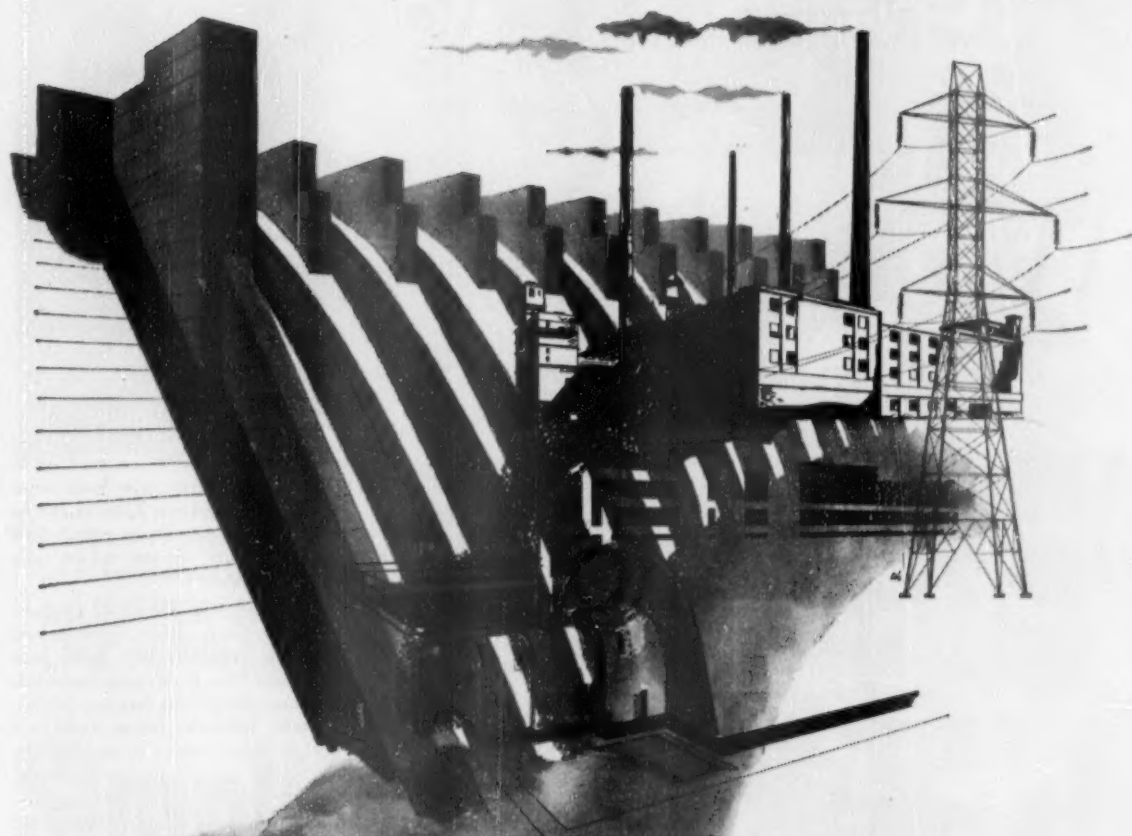
. . . The Venice Area Chamber of Commerce is one of the oldest trade organizations on the west coast of Florida, and was serving this area long before there was any South Venice project to be an "adjunct of." It was founded on Apr. 18, 1927, as the Venice-Nokomis Chamber of Commerce. . . . It was the only group of its kind in Venice until last year, when a merchants' association, a junior chamber and the present Venice (City) chamber were formed. I do not know how one determines what constitutes an "official organization of the businessmen of Venice," since no chamber has any connection with a governmental or administrative body. However, the Venice Area Chamber of Commerce is official enough to be the only group in the area to receive an appropriation for advertising expenditures from the Sarasota County Board of Commissioners, so far. Its sponsorship of the South Venice project did result in a heated controversy here, with some of the residents taking the position that a chamber had no right to identify itself with a private business operation. However the directors took the position that the advertising and capital outlays would bring the area more publicity than could otherwise be obtained for many years—a position your story has helped to prove correct.

The Venice Chamber . . . was not organized until last July or August . . . it was instigated, primarily, by a number of residents opposed to the South Venice project, aided by others who were willing to join any organization designed to work for the community. Many of the latter . . . now belong to both the area and city chambers, and sincerely support the programs of both, the older organization serving the entire trade region and the new one confining its efforts to the corporate limits. . . .

You might be interested . . . to learn that your story, which I feel was excellent with the exception of the quoted paragraph, resulted in about 50 requests for lots in South Venice from your readers.

PETER S. CONOVER

EDITOR & PUBLISHER  
VENICE GONDOLIER  
VENICE, FLA.



## **BROWN & ROOT...paces progress in power engineering**

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*What is there about Wausau, Wisconsin, that makes it the ideal home for one of the world's most important insurance companies?*

*Employers Mutuals invited the president of The Chicago Board of Trade to visit its home town and find out.*

# Wausau Story

by SYLVESTER J. MEYERS, President, Chicago Board of Trade



"...an amazing variety..."  
Mr. Meyers (left) and Allen Abrams.



"...preventing fires wasn't just talk." Mr. Meyers (left) and Mr. Roehl visit Fire Chief Petzold.

## **Employers Mutuals of Wausau are "good people to do business with."**

There's such a thing as a *Wausau personality* that you don't have to go to Wausau to find. It's a way of doing business. You'll find it in all our 89 offices throughout the country. We have a reputation, born and

raised in Wausau, for fairness in giving our policyholders all the protection they have a right to expect from their insurance—and an unexcelled record for prompt claim payments. We are one of the world's largest writers of workmen's compensation insurance, and handle all other lines of casualty and fire insurance as well.

**Speaking of fire insurance**, it is good advice to recheck your policies. Property values have changed. Replacement costs are high. Let an Employers Mutuals man help you see if your insurance covers all the items and risks you think it does—and in safe amounts. Phone our local office, or write Wausau, Wis.

## Employers Mutuals of Wausau





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in lubrication costs  
**MULTIPLY  
LIKE MAGIC...**

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- 2 Speeds-up Application
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- 4 Cuts Down Inventories
- 5 Eases Stock Control
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Be sure with Pure—Sales offices located in more than 500 cities in Pure's marketing area.

If your plant lubrication is complicated by dozens of different oils and greases, chances are, you're wasting valuable maintenance dollars and man-hours.

Right now's the time to **SIMPLIFY** your lubrication setup—and *watch savings multiply like magic*—with Pure Oil multi-purpose lubricants.

Each Pure Oil multi-purpose lubricant, you see, is scientifically compounded to perform *more* than one operation... job-proved to cut lubrication costs all along the line—from purchasing to inventory to application.

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Chemical progress in combating corrosion has been advanced considerably with Polyrad®. This filming amine inhibitor reduces corrosion in producing wells and refineries. Polyrad and other amine derivatives improve efficiency of secondary recovery operations. And Hercules® explosives aid in laying pipe lines.

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... TO MAKE TOYS PLAY-PROOF

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**HERCULES**

# BUSINESS OUTLOOK

BUSINESS WEEK

MAY 22, 1954



What will happen to business is becoming less a problem than when. Production and trade leveled off without much external stimulation. Left on its own, this might be only a temporary blessing (ending, say, about the time auto sales pass the seasonal peak).

But chances are growing that business won't be left unchaperoned.

Hopes for a settlement in Southeast Asia still exist. But the odds are that this would involve setting a line that we would defend with men as well as money and materials (page 37).

And we will redouble our efforts to counter Russia's big bomber.

All this may not directly affect production at once. But it is likely to do so indirectly—by stimulating both business and consumer spending.

—•—

Germens of inflation already are lurking in ample and easy money.

Symptoms of the disease have been developing visibly during the recent rise in commodity prices (BW—May 1 '54, p17).

Intensified competition has been the antidote so far. But any growth in demand for goods would reduce its effectiveness.

Manufacturers will be reluctant to raise prices as long as a good deal of capacity remains idle. But basic costs are pushing upward.

Numerous raw materials—notably steel scrap and some of the nonferrous metals—already have been marked up. (The group of materials averaged daily by the Bureau of Labor Statistics has risen 6% since early March.)

And now pattern-setting wage negotiations are under way in steel.

Here's a sample of how the steel industry is watching costs:

Inland Steel is rekindling a blast furnace. More ore will be converted into pig iron for steel making. "And what's the economics of that?" you ask. Very simple; nine straight weeks of rising scrap prices.

This, in turn, means more employment in the Minnesota mines—and greater activity for the Great Lakes ore fleet.

This year's wage boost won't feed inflation fires to the extent most have in the last decade. The cents-per-hour boost will be small. And the pattern won't be so widely followed throughout industry.

Yet hourly payments will help stem the decline in consumer incomes. And increased fringe costs push up product prices just like wages.

Business and consumer spending remain the most explosive potentials for anyone trying to weigh the chances of a price spiral.

Purchasing agents, for example, eye inventories warily. They see ample stocks—at present production levels. But, they wonder, what would happen to delivery time—if many plants started buying all at once?

Consumers, of course, could frighten just as easily as they did in 1950 if Indo-China were to look like another Korea—or worse.

# BUSINESS OUTLOOK (Continued)

## BUSINESS WEEK

MAY 22, 1954

Business indicators have leveled off with surprising unanimity.

Not only was the Federal Reserve Board's index unchanged in April at 123, but there also was a pretty general firming up among its components. Notably, metal fabricators steadied after their sharp slide.

Transportation equipment (which includes autos and aircraft, as well as railway rolling stock) had one of the better gains.

Some of the weekly indicators—which find reflection in Business Week's Index—are improving their showings. Steel, for instance, has finally climbed above 70% of capacity. And power output, which was only 3% above 1953 a short time ago, has widened the gain to 5% or 6%.

Employment figures are joining in the general show of stability.

The number of new claims for unemployment compensation has settled at about 325,000 a week; and the number drawing checks hasn't varied much from the 2.4-million mark in the last three months.

Stability isn't enough to ward off a sharp rise in unemployment this summer, however. There won't be work for all the seasonal job seekers.

—•—

Bankers are among the few who, so far, have felt no hint of recovery in their own business.

Business loans have continued to decline (except for a quick rise-and-fall at income tax time) since yearend. They now are down about \$1¼-billion from last December and \$1-billion below this time in 1953.

(Against this background of money-going-begging, this week there was new talk of lower reserve requirements—which would increase lendable funds.)

—•—

The textile business seems to have perked up at least a little this month, but there wasn't much to shout about earlier.

In cotton, for example, domestic consumption for the crop year ending July 31 probably won't go much over 8¾-million bales. That would be down from the previous season's 9½-million.

Exports, however, have taken a turn for the better. Despite slack last summer and fall, it now looks as if the total shipments for the season will run about 3½-million bales, a gain of 500,000 over a year earlier.

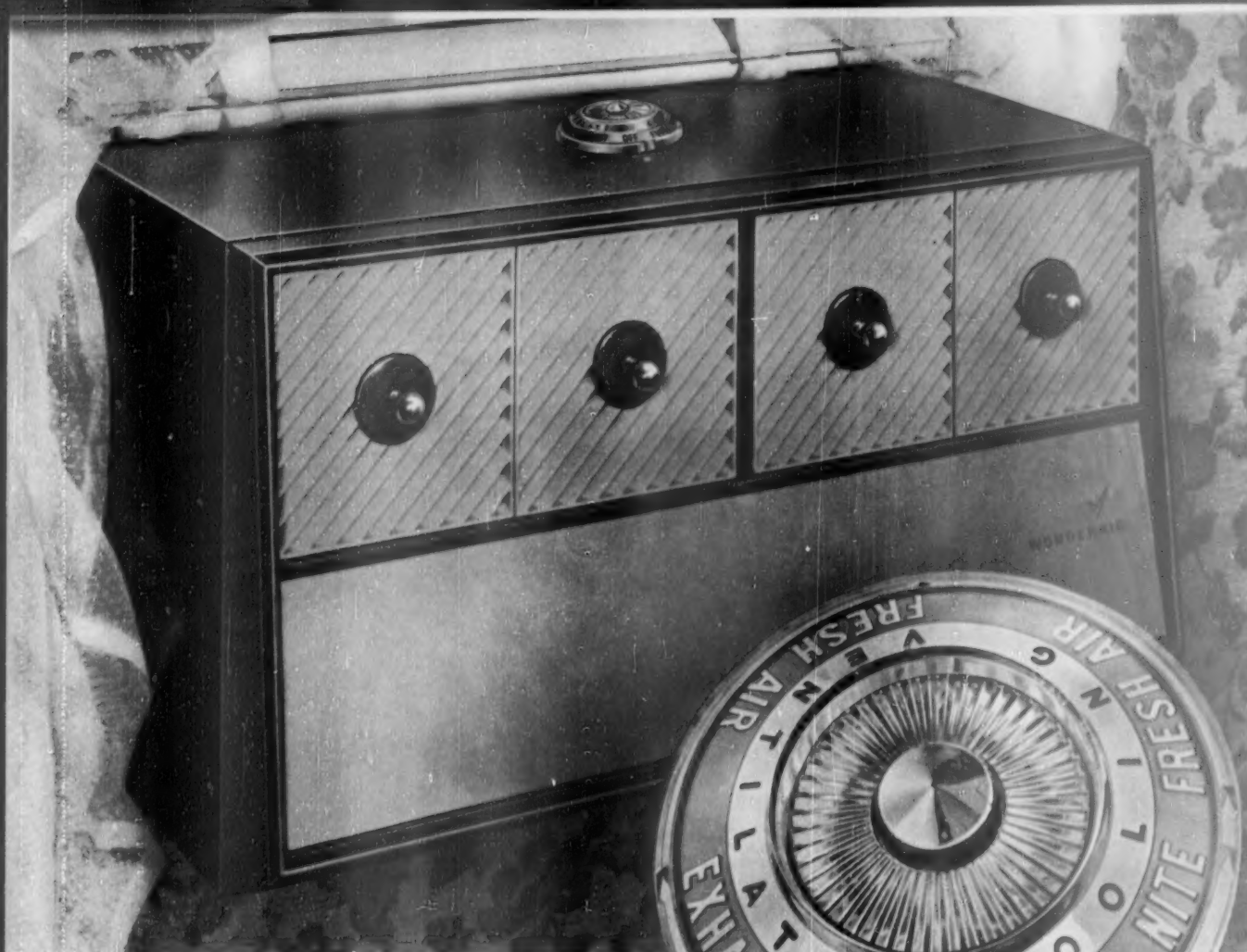
King Cotton's share of the textile market—about 80% prewar—now has fallen to 70%. (Per capita use of about 28 lb. is little changed from before World War II; all the gains have gone to competitive fibers.)

Cotton's great loss, however, is in tire cord. Virtually unchallenged before the war, cotton now gets a scant 13% of this business.

—•—

One doctor suggests that air pollution probably is more damaging to the lungs than smoking. Another says: "Don't inhale until we learn more."

Yet the lung cancer scare must be held at least partly accountable for the apparent decline of about 10% in first-quarter cigarette sales.



## *The Touch That Sells a Fine Product—* **PLEXIGLAS**

The moment customers see this colorful PLEXIGLAS control knob, a favorable impression is created. The knob does more than operate the air conditioner. Molded of PLEXIGLAS, it adds sales appeal.

Parts molded of PLEXIGLAS have a rich, brilliant appearance that stays fresh and bright for years. That is why this acrylic plastic, its durability proved by years of use for enclosures on aircraft, is used by manufacturers in other fields for decorative and functional parts such as trademarks, nameplates, dials, lenses, and instrument panels.

PLEXIGLAS can add a final touch of sales power to *your* product. We will be glad to tell you how.

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CHEMICALS

FOR INDUSTRY

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In some forms of polio, excessive and thickened lung secretions prevent the normal transfer of oxygen to the blood. Even a patient in an iron lung may strangle as surely as if some strong hand had seized him by the throat. To help counter this danger successfully, doctors are now using super-saturated oxygen... the oxygen to sustain life, the humidity to thin the secretions so they can be expelled, and normal lung functioning restored.

As an aid to easier and better administration of humidified oxygen therapy, NCG developed a new model of its extremely successful "Microfier," and a special open-top oxygen tent... both of them for use with the iron lung respirator. The NCG Microfier is the only continu-

ously operating nebulizer that delivers "cold steam"... moisture particles of the microscopic size required for deep penetration of the lungs.

This new equipment was first used last winter when bulbar poliomyelitis struck in a western community. The new Microfiers and open-top tents were flown in and put to work. Of the equipment the polio clinic director writes: "the most satisfactory units we have used from the standpoint of moisture saturation... capable of supplying oxygen and moisture to a very high degree of efficiency." The same equipment has had remarkable success in treating babies born with serious lung congestions, and in postoperative care of surgical patients.

The NCG Microfier is an out-

standing achievement of the NCG program of continuing research in cooperation with eminent medical authorities which has developed many new ideas... in NCG systems used by leading hospitals for piping oxygen to rooms like running water... in oxygen tents, masks, and other inhalation therapy equipment.

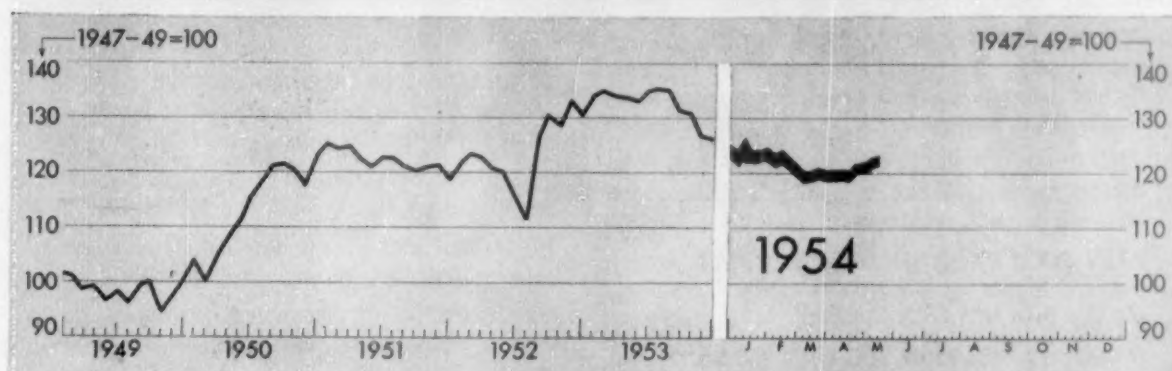
#### NATIONAL CYLINDER GAS COMPANY

840 N. Michigan Avenue, Chicago 11, Ill.

"Microfier" is a trade mark  
Copyright 1954, National Cylinder Gas Company

**NCG**<sup>®</sup>  
MEDICAL DIVISION

# FIGURES OF THE WEEK



**Business Week Index (above)** . . . . . \*123.6    123.3    120.9    134.1    91.6

## PRODUCTION

Steel ingot production (thousands of tons).....	1,668	†1,690	1,636	2,250	1,281
Production of automobiles and trucks.....	151,797	†154,640	148,559	177,805	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).....	\$58,732	\$55,295	\$49,931	\$48,567	\$17,083
Electric power output (millions of kilowatt-hours).....	8,380	8,438	8,345	7,959	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,428	6,422	6,590	6,359	4,751
Bituminous coal production (daily average, thousands of tons).....	1,129	1,113	1,110	1,472	1,745
Paperboard Production (tons).....	252,436	237,514	242,332	251,473	167,269

## TRADE

Carloadings: manufacturers, misc., and l.c.l. (daily av., thousands of cars).....	67	67	67	75	82
Carloadings: raw materials (daily av., thousands of cars).....	41	41	34	52	53
Department store sales (change from same week of preceding year).....	-4%	†-2%	+16%	+9%	+30%
Business failures (Dun and Bradstreet, number).....	248	206	198	198	22

## PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	438.4	434.1	439.1	417.8	311.9
Industrial raw materials, daily index (U. S. BLS, 1947-49 = 100).....	86.8	86.5	86.0	86.9	††73.2
Foodstuffs, daily index (U. S. BLS, 1947-49 = 100).....	102.3	101.3	103.9	89.7	††75.4
Print cloth (spot and nearby, yd.).....	19.2¢	19.1¢	19.5¢	21.0¢	17.5¢
Finished steel, index (U. S. BLS, 1947-49 = 100).....	140.8	140.8	140.9	134.2	††76.4
Scrap steel composite (Iron Age, ton).....	\$28.08	\$27.58	\$25.67	\$38.17	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.).....	30.000¢	30.000¢	30.000¢	30.000¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.34	\$2.45	\$2.43	\$2.38	\$1.97
Cotton, daily price (middling, ten designated markets, lb.).....	34.47¢	34.47¢	34.13¢	33.61¢	30.56¢
Wool tops (Boston, lb.).....	\$2.12	\$2.12	\$2.12	\$2.11	\$1.51

## FINANCE

90 stocks, price index (Standard & Poor's).....	228.3	227.1	220.6	197.0	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.47%	3.47%	3.47%	3.78%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1½-1½%	1½-1½%	1½-1½%	2½-2½%	3-1%

## BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	54,153	54,047	52,933	53,346	††45,820
Total loans and investments, reporting member banks.....	79,670	79,893	78,742	75,809	††72,036
Commercial and agricultural loans, reporting member banks.....	22,045	22,145	22,558	23,083	††9,299
U. S. gov't guaranteed obligations held, reporting member banks.....	31,994	32,377	31,298	29,040	††49,879
Total federal reserve credit outstanding.....	25,484	25,274	25,404	25,831	23,883

## MONTHLY FIGURES OF THE WEEK

	Latest Month	Preceding Month	Year Ago	1946 Average
Bank debits (in millions)..... April.....	\$154,661	\$171,260	\$145,567	††\$85,577

\* Preliminary, week ended May 15, 1954.

† Revised.  
†† Estimate.

# Date for "Latest Week" on each series on request.

# in BUSINESS this WEEK...

## GENERAL BUSINESS:

**FOR THE SOUTH: NO TURNING BACK.** Though states may seek ways to get around the Supreme Court ruling against school segregation, they won't stop building schools.....p. 25

**GROUP MEDICINE ON THE PAN.** New York State doctors' move to brand a member's participation as unethical reopens the issue.....p. 26

**FAST FOOTWORK IN THE OIL TRADE.** Has a Greek shipping magnate walked off with a monopoly in a deal with Saudi Arabia?.....p. 27

**MOLOTOV GOES ON THE OFFENSIVE.** Through victories in Indo-China, he hopes to upset Asian power balance, pry France loose from Western

world .....p. 28

**HOUSING ROLLS ALONG, DESPITE SCANDAL.** New bill is likely to pass the Senate pretty much intact; FHA offices are doing business.....p. 30

**NEW UAW ROLE.** Union will run Kaiser-Willys Toledo dealership to give K-W a boost.....p. 31

**TUBELESS TIRES,** pure luxury in the past, may bow as original equipment on 1955-model cars....p. 32

**FIRESTONE LOSES ITS VOICE.** Monday night TV show is squeezed in tussle between NBC and advertisers for control of programming.....p. 32

Business Briefs .....p. 34

## BUSINESS ABROAD:

**JOHN BULL IS BACK ON HIS FEET.** Britain is showing basic signs of economic health.....p. 158

**IS IT THE CRISIS POINT?** Chile may soon pay the price for living too high since the war.....p. 162

**DAMPER ON EAST-WEST TRADE.** Despite changes, U.S. experts find Russian policy is still basically anti-trade.....p. 166

## COMPANIES:

**COUNTING ON AN AUTOMATIC BOOM.** For Beckman Instruments, a five-fold expansion since '49 isn't enough (cover).....p. 178

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## Frozen bushings speed assembly of tractor rollers

... STRENGTHEN PRODUCT, TRIM PER-UNIT COST

Bushings used in track rollers are key parts in the manufacture of crawler tractors. Until recently, Caterpillar Tractor Co., Peoria, Illinois, used two-piece bushings that required several separate operations to assemble. Now, with the help of low-temperature refrigeration, they have streamlined this operation with considerable savings in man-hours and per-unit cost.

The composite bushings previously used consisted of an outer member of cast iron and an inner bushing of bronze. The two parts had to be pressed together, then drilled, reamed, and fitted with pins to prevent any rotary motion between them. A new process—in which bushings are shrunk by chilling and then expansion-fitted—eliminates all these laborious operations.

Now, one-piece bushings of special alloy aluminum are fed into a Webber Low Temperature Industrial Freezer and pass through it on tracks. Within the freezer, "Freon-22" (monochlorodifluoromethane) is used to chill a con-

denser containing "Freon-13" (monochlorotrifluoromethane) which in turn chills the parts. Bushings are brought from room temperature to approximately -100°F. in 6½ minutes.

When the chilled bushings reach the assembly point, they are manually removed through small access doors and fitted easily into the roller units. When they warm to room temperature, the bushings expand to original size to form a tight fit which can withstand 25 tons' pressure!

"Freon"® refrigerants have proved to be highly efficient on this job because they permit close temperature control. The new bushings are easier to hold to close tolerances, are stronger, and can be turned out faster at lower cost.

Hiking production of tractor roller units is just one of the many jobs "Freon" refrigerants can do. They're ideal for all types of industrial applications and cover a complete range of temperature and humidity conditions. All are safe... nonflammable, nonexplosive, virtually

nontoxic. Ask your own engineers for further details about "Freon" refrigerants and their many uses in industry.

Free booklet, "How Air Conditioning and Refrigeration Benefit Industry." For your copy, write E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Div., Wilmington 98, Delaware.





Mr. Milton Kaufman, President of Aquatogs, Inc., tells how:

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"We also depend on Air Express to move goods without a hitch from our door to the retail store receiving room."

"Yet, practically all of our orders cost us less with Air Express than with other air services."

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CALL AIR EXPRESS . . . Division of RAILWAY EXPRESS AGENCY

# For the South: No Turning Back

● The Supreme Court decision abolishes segregation in the public schools.

● This was a cherished principle in the South, yet it may have outlived its time. Economic pressures were already pushing the way the court now points.

● Schools will still be built in the South, though ways to get around the court will be tried.

This week, the U.S. Supreme Court unanimously outlawed racial segregation in the public schools. The social and political significance of this decision—arrived at by justices from the South and North, from the Democratic and Republican parties—is hard to exaggerate. It has been labeled the most important civil rights ruling of the century.

The economic significance is equally great. But it is not so easy to label or evaluate.

In the long run, the whole structure of the nation's labor force and the nation's markets will be affected by this acceleration in the trend away from segregation.

In the short run, the most pressing questions are: How will the South accept the decision? And what difference will it make in the huge school-building program (BW—Jul.25'53,p170) that is now under way?

• **Forces at Work**—It will take months—probably more even than the Supreme Court's cooling-off period until fall—to see what the South decides to do.

Regardless of the segregation question, however, the South's total need for school construction is urgent. Authorities variously estimate demands of \$1.7-billion to \$2.8-billion just to catch up with past deficiencies, without providing classrooms for the increasing pupil load.

Southern states have stepped up their spending in the past few years—not because their social consciences told them to but because their people demanded better schools for their children. Even the wildest objectors to the Supreme Court decision admit that the South shouldn't express its defiance by canceling the school building program.

Gov. Herman Talmadge of Georgia, the most violently outspoken of the southern governors, said the \$200-million program in his state would go on (600 schools are under contract, out of 1,036 to be built). "Georgia needs the schools," he explained. Besides, bonds and construction contracts could hardly be voided without running into law suits.

• **The South's Reaction**—At midweek, reaction to the Supreme Court decision made these things clear:

• The South was smarting under the decision but, by and large, it wasn't talking open defiance.

• The process of integration will be delayed—partly by court intent, partly by local custom. In many areas, the "natural" segregation of races in residential districts will prevent real mixing for years to come.

• **Political Fire**—In the wake of the decision, indignant words were spoken, and threats were made. But the threats were veiled and so far, not backed up by actions.

Gov. Talmadge, for example, declared that the court had reduced the Constitution to "a mere scrap of paper" and that white and Negro pupils in Georgia would never sit side by side in a classroom. But he did nothing precipitate about calling the legislature to act on a proposed constitutional amendment to abolish public schools.

South Carolina's Gov. James Byrnes was "shocked to learn that the court has reversed itself." He did not, however, mention the constitutional amendment approved by voters in 1952 that would eliminate the requirement for a free public school system. This amendment must still be ratified by the legislature.

Mississippi was "disappointed" by the ruling, but Gov. Hugh White urged a "go slow" attitude. Virginia contemplated "no precipitate action." Arkansas said it would attempt to comply with the legal requirements of the court's decision, announced a committee would start work at once on how to do it. Other states followed much the same pattern—words of caution, terse official statements "until the decision is studied," pronouncements of "wait and see" until fall.

• **Slow Process**—All that happened this week underscored one inescapable fact: The transition to mixing in the schools will be slow.

The court itself ordered reargument on how and when its decision should be put into effect; it set no date for this, but it will come some time after next October. In the meanwhile, it has invited the U.S. Attorney General and the states that require or permit segregation (all told, there are 21, plus the District of Columbia) to file briefs outlining what they think should be done.

It is quite possible that the court's implementing decrees will take into account a large measure of southern thinking. There was feeling in Washington this week that the court would apply its principle gently at the start—in order to get it applied at all. Some lawyers believe that the order to integrate will bind only the five specific school districts involved in the cases decided this week. Other districts might be left untouched until individual suits were brought against each administrative unit.

• **Evasion Tactics**—Even if the court were to take a hard-knuckle, across-the-board approach, however, integration could hardly be enforced overnight.

In the past 10 years, the South has cut some sizable sections out of the wall between whites and Negroes. But the walls of its public grade schools are still solid. Rather than collapse them in the face of a sweeping decree, some of the states would evade the decree.

There have been several proposals of how to do it. One of Georgia's plans is the constitutional amendment to abolish the public school system. The state would make direct appropriations to each school child, who would then choose the "private" school he wanted.

to attend. The white private schools, of course, would not admit Negroes.

The plan most favored in Alabama is to have the legislature pass a bill giving school boards authority to transfer a pupil from one school to another "to promote the best interests of education." This same idea has been proposed by one of Georgia's gubernatorial candidates. He would give county superintendents wide discretion in designating the schools so as to serve "the best interests of the child and also the best interests of the school system."

• **Double or Nothing**—A more elaborate idea has come out of South Carolina. It proposes a system of mixed schools that could be attended by all children. At the same time, the state would provide for separate schools upon petition of a representative portion of citizens of either race in a given county or school district. Both schools would be supported by public funds. The state would leave it up to the parent to decide which school his child would attend.

Virginia's thinking has been along the line of abolishing the compulsory school attendance law and the provision for bus transportation, which is tied to it. The schools would be integrated. But no parent would have to send his child to school. The theory is that gradually the people would resign themselves to integration. Without money for private schools, parents would eventually have to accept it or see their child go uneducated.

Whether any of these plans would stand up in court is a matter of pure guesswork now. But even if they didn't, they would still serve as a delaying action, which is their main purpose anyway.

At the moment it seems likely that the states will hold off on these steps until they see what the high court does in the fall. By then, of course, some of their thinking may have changed.

• **Capital Plans**—Delay is unlikely in the District of Columbia. Washington schools are directly involved in one of the five cases decided by the high court, and President Eisenhower himself told the District commissioners that he hoped the capital would be "a model for the rest of the nation."

The capital wasn't caught by surprise, can't very well plead for more time to work out integration procedures. At least five of the District school board's nine members have announced they favor integration by next September, and Supt. Hobart M. Corning has long studied ways and means.

Nobody's saying so, but the feeling persists that schools in the District may reopen next September on a non-segregated basis. The District's recreation board has this week prohibited segregation in recreation programs.

## Group Medicine on the Pan

New York State doctors' move to discipline members who participate has reopened the issue. Plans have spread, and stakes are higher than ever.

The New York State Medical Society, largest group in the American Medical Assn., last week took action that might well send the issue of prepaid group medical plans to the federal courts. It raised the question of whether professional groups can hamstring such plans by branding some of their practices as unethical.

This practically assures a bitter fight when the AMA's House of Delegates takes up the issue next month in San Francisco, for the plans have their backers, too.

Involved in the dispute are such non-profit plans as the Health Insurance Plan of Greater New York (HIP), which sells full surgical and medical insurance coverage on a group basis. It establishes panels of physicians in medical centers scattered around the five boroughs of New York City, plus Nassau County on Long Island. Subscribers can receive treatment at these centers. The surgical and medical coverage applies in or out of hospitals and includes residence calls. Doctors on the panels are paid by salary, not by the usual fee-for-service method.

• **New York Case**—In last week's action, the New York Medical Society:

• Upheld charges that a Queens County physician, who is director of one of HIP's centers, was guilty of unethical practices because his name appeared in an HIP advertisement.

• Approved a resolution offered by Dr. Alfred P. Ingegno, of the Kings County Society in New York City, designed—as he put it—"to clarify" the state professional code of ethics.

The Ingegno "clarification" presumably becomes part of the state code, but before it can be fully effective it must be reviewed by AMA's Judicial Council to see if it squares with the national AMA code. If the Judicial Council approves the resolution, HIP says it is prepared to "take the case to the Supreme Court."

Here's what the New York doctors want AMA to accept:

• When "restricted panel medical plans" advertise, they are really advertising for the benefit of the doctors in the panel. Hence this practice is unethical. (This would not apply to Blue Cross and Blue Shield, which have no panel of doctors, or to group plans that don't advertise.)

• Physicians could work for salaries in institutions or corporations as long as they confine their salary work to

public welfare cases. Private patients would still have to pay the fees to the doctor, not to an organization.

• If any organization or company selling medical rare insurance insists that subscribers go to doctors on its panel, this amounts to denying patients a free choice of physicians—an unethical practice.

• **Spreading**—The group medical practice issue has become hotter in recent years as such plans spread. In New York, for instance, HIP has grown in seven years to a group of 29 medical centers with 410,000 insured persons served by about 1,000 physicians. About 270,000 of the insured are New York City employees and their families; the rest are from companies and from big residential developments.

In all, there are about 70 group plans around the country. One on the West Coast, the Kaiser Foundation Health Plan centered in Oakland, Calif., has had a running fight for several years with the California Medical Assn. Started by Henry J. Kaiser, it provides prepaid medical care for subscribers, not necessarily Kaiser employees.

Currently, though, the California Medical Assn., while cherishing its hostility toward closed panel systems like Kaiser's, is drifting ever so slightly with the tide of liberalized prepaid medical service. Last week, the CMA House of Delegates agreed to permit families with an income up to \$6,000 (instead of the previous \$4,200) to subscribe to the California Professional Service—CMA's own version of prepaid insurance.

• **Means War**—HIP considers the New York State Medical Society's action as virtually a declaration of war, although such a view is pooh-poohed by men like Dr. Ingegno.

HIP claims several court cases as a weapon in its favor. One was a U. S. Supreme Court ruling against AMA and the District of Columbia society. The court held them guilty of criminal conspiracy for opposing a plan similar to HIP and noted they "were interested solely in preventing the operation of a business conducted in corporate form by Group Health."

HIP also cites a ruling of the State Supreme Court of Washington that a county medical society can't "through the mere use of the term 'unethical' clothe with immunity acts which would fall under the ban of the antimonopoly provision of our constitution."

Saudi Arabia's tanker deal with Greek shipping magnate catches the industry by surprise. Is it a play for monopoly? Or just . . .



KING SAUD OF SAUDI ARABIA



ARISTOTLE SOCRATES ONASSIS

## Fast Footwork in the Oil Trade

Aristotle Socrates Onassis, the Greek tanker magnate with an Argentine passport and a controlling interest in the principality of Monaco, has apparently been bearing gifts to King Saud of Saudi Arabia.

This week, Arabian American Oil Co., the governments of the U.S. and Great Britain, and a string of independent oil shippers around the world are trying to figure out what will happen to the world oil situation as a result of the deal Onassis concluded with Arabia. If one interpretation is right, Onassis could wind up with a monopoly on the transportation of all 42-million tons of petroleum and its products that Aramco produces annually in the Middle Eastern kingdom.

• **Terms**—Onassis seems to have begun talks with the Arabs last year. The deal was closed in February and officially promulgated last month. Only now, though, are the terms coming through to the West. Among other things, they provide that Onassis gets first right to carry all Arabian oil except what Aramco or its parent companies can carry in ships they owned and operated in the trade before Dec. 31, 1953.

Onassis has agreed to set up Saudi Arabia Maritime Co., Ltd., to run the ships he puts into the trade. Apparently, the Arabian government will hold the controlling interest in the company, with Onassis getting a substantial share for his trouble.

What's more, the deal also requires that rates charged by SAMCO "will be in conformity with the charges known and decided by the United States Maritime Commission." The USMC rate, in force during World War II, for oil from Ras Tanura, the Persian Gulf port that ships most Arabian oil, is \$12.70 a ton to New York. But the going rate today for that run is something less than \$7. That would mean a bonus

of about \$6 a ton for Onassis, out of which he pays a royalty of 21¢ to the royal treasury.

If the agreement defines "owned and registered" as including ships that Aramco has under long-term charter—and that's the way the trade defines it—then Onassis initially will have claim to only about 10-million tons a year. Up till now, that has been carried by British, Norwegian, Greek, Italian, and other independent operators. And already British tanker men are clamoring for action by the Foreign Office.

Aramco can ship the rest on its own vessels now. But as these ships are retired, they will have to be replaced by Onassis' SAMCO tankers, theoretically giving him an eventual monopoly. That, at least, is the way it now looks.

• **The "Ifs"**—It all depends on what Onassis is really after. No one seriously believes he merely wants to help Saudi Arabia gain a place as an important maritime power. The Arab League, meeting last year, decided it ought to become more of an economic organization. There was some talk of setting up a merchant fleet to implement the decision. Meanwhile, Onassis has been building supertankers as fast as he can find shipyards to take his orders.

But the tanker market has been at rock bottom for more than a year (BW—Jan. 23 '54, p. 88). Oil companies aren't committing themselves for long periods. And Onassis has ships abuilding and approaching the end of long-term charters that he must provide business for in a hurry. He recently said that 375,000 tons are on order with \$35-million yet to be paid on them. And within two years these launchings plus ships coming out of charter give him 500,000 idle tons in a sagging market.

• **Strategy**—With this situation in mind, some observers are concluding that all Onassis really wants is a very

long-term deal from Aramco for these ships. And the Saudi Arabian deal, they say, is merely his means to that end.

With such a deal, they figure Onassis will forget about his monopoly and merely go through with the part of the agreement that calls for registering some ships under the Saudi Arabian flag, giving seaman training to Arab midshipmen, and building a port at Jeddah for pilgrims to Mecca.

• **Defense**—In any event, the Aramco companies are not completely defenseless. The four stockholder companies—Standard Oil of New Jersey, Standard Oil of California, Texas Co., and Socony-Vacuum—ship oil from many other places than Saudi Arabia. And they have used a lot of Onassis tonnage in these trades. But they can boycott Onassis or anybody else who wants to go along with him, just as Anglo-Iranian has done at Abadan, Iran. Aramco can do the same to Onassis. And at least one tanker broker already has noticed a tendency on the part of the Aramco stockholder companies to prefer some other vessel to one of Onassis in recent weeks.

Of course a boycott has limits. The Saudi Arabians have been tough for Aramco to deal with. A high order of diplomacy and royalties has been required at every turn. And King Saud may get mad enough to cut off the concession if production and, consequently, payments to his treasury.

Aramco isn't saying anything for the record at this point. And the British Foreign Office and the U.S. State Dept., which also have reportedly played a quiet role in the affair, aren't talking either. But one thing is said to be worrying everybody: What happens if Onassis or somebody else sells the same kind of deal to Indonesia, Venezuela, and other foreign producing areas?

# Molotov Goes on the Offensive

● By victories in Indo-China he hopes to upset Asian power balance and pry France loose from Western world.

● Success would carry vast weight in the struggle for domination inside Russia.

● The U.S., moving to block him, may end up by having to put forces into Indo-China.

Until early this year it looked as though the West was winning the cold war. Though the Berlin Conference got nowhere, there seemed to be a good chance that East and West were settling down to a period of, at worst, uneasy equilibrium.

Then, unexpectedly, the international scene changed. Suddenly the smouldering Indo-China war flared to a climax, and the West seemed to be back in the summer of 1950 when Stalin unleashed his attack against South Korea. The Western alliance, which was so firm then, now looks badly shaken. And at Geneva we are threatened with a diplomatic and psychological rout.

• **Showdown**—The fact is, the Geneva Conference, now going into its fourth week, has become a decisive showdown between East and West. The future power balance in Asia is at stake there and also the Western defense system in Europe. Before the present crisis is over, the U.S. may have to intervene with force in Indo-China, even at the risk of war with Red China.

Still, the odds are against a widening of the Indo-China fighting into a world-wide conflict. Neither the East nor the West is acting today as though Indo-China were the prelude to World War III. Even if the U.S. gets into the fighting there, it is likely to remain a localized action, limited to Southeast Asia.

• **Second Look**—There is no sign that the Kremlin has basically reversed its post-Stalin policy of avoiding direct military clashes with the U.S. This policy showed up last year when Moscow called off its aggression in Korea, passively accepted a pro-Western political coup in Iran, and carefully avoided any open friction with the West during the East German uprising. It was this policy that led Western statesmen, notably Britain's Churchill, to feel that tension was easing and that an East-West settlement might even be in sight.

It's clear now that this feeling failed to take account of Russia's development of the H-bomb and how it would affect Soviet foreign policy. Looking back, you can see that Kremlin policy

hardened as soon as Russian leaders believed they had achieved a world balance in atomic power. Apparently they concluded that the risk involved in local wars was now less than it had been before.

• **New Offensive**—There's no doubt about the shift in Soviet policy. Back at the time of Stalin's death, Foreign Minister Molotov declared that there was no problem between East and West that couldn't be settled by diplomatic means. Today Molotov is directing against the West one of the most daring diplomatic and military offensives in Soviet history. He is aiming no longer at a compromise in the cold war, but at clearcut Soviet victory over the West. He hopes to achieve this by military successes in Indo-China that would add this country to the Communist empire and, in the process, produce a neutralist wave in France strong enough to take the French out of the Western alliance.

This does not mean that the Kremlin is leading from strength. All the signs point to continued economic and political difficulties in Russia, with a bitter factional fight raging for Stalin's succession. In fact, Molotov's toughness may be partly a product of this factional fight. If he and his supporters can achieve a great victory in Geneva, their hand would be immensely strengthened in the Kremlin power struggle.

• **Weak Link**—Weakness in the West has been a decisive factor in the situation. Molotov would not have been able to play this game if France hadn't proved a terribly vulnerable spot in the West's armor. It's almost true to say that the mounting crisis in France offered Molotov his opportunity on a silver platter.

By the beginning of this year, Moscow obviously had decided that France had lost its colonial war in Indo-China and that the national crisis in France over its role in Europe could be exploited, via Indo-China, to knock the French out of NATO.

The U.S. and Britain were slow in grasping this fact. Despite some apprehension, Washington continued to

bolster France's bankrupt military and political policy in Indo-China. We agreed to meet the Communists at Geneva in order to help the Laniel-Bidault government, though Dulles was skeptical that anything would come out of the conference. It was only with the loss of Dienbienphu that the U.S. began to revise its whole policy toward Indo-China and France.

• **Two Jobs**—Dulles' job now is a double one—to save Indo-China from complete conquest by the Reds and, more important, to save France from going neutralist and thus falling into Moscow's clutches. It's the dual nature of this problem that explains the complicated diplomacy Dulles has to use in Geneva and Paris.

In Geneva we are trying to help the French achieve a compromise settlement that would fall short of appeasement. To this end, the U.S. is co-operating with the British at Geneva, even to the point of letting Foreign Secretary Eden carry the ball for the West.

In Paris, the U.S. is playing the other line. We are negotiating separately with pro-U.S. political and military leaders in an effort to keep French forces in the field in Indo-China and to get French agreement to internationalizing the war.

• **Friction**—This double-barreled diplomacy has caused some hard feelings between Washington and London. But in this situation sharp differences between the U.S. and Britain are inevitable. The British no longer have the economic and military strength to take the kind of risks that we can in Southeast Asia. Nor will London act as the U.S. will, without regard for India's neutralist policies. Then there's the wide gap between U.S. and British views on Red China. London has accepted the Communist control of mainland China as final, whereas the U.S. has not as yet.

All these things mean that the Churchill government is more reluctant to intervene in Indo-China than is the Eisenhower Administration—though there's no doubt that London will go along with Washington before letting all Southeast Asia fall into Communist hands. Britain has vital interests of its own in that area, has long sought a coordinated strategy with the U.S.

U.S.-British differences arise, also, out of the domestic political pressures in each country. The fear of an H-bomb war is very real in Britain. So is the desire of British business for trade with Russia and China. What's more, Churchill's Conservative Party is now

riding a wave of popularity created by growing prosperity in Britain (page 158). Churchill doesn't want to throw this advantage away by risking war, unless it's absolutely necessary.

In the U. S., Republican disunity has limited Dulles' freedom of action in dealing with the Indo-China crisis. One wing of the Republican Party has aimed to use the crisis not just to save Indo-China but to upset the Mao regime in Peking. The other wing, largely for domestic economic and political reasons, wants to try for a stable balance between communism and the West in Asia without involving the U. S. in a large new military effort in that part of the world.

• **Odds Favor Dulles**—Despite these handicaps, and some false starts, Dulles still has more than an even chance of blocking Molotov's ambitions. Already he has achieved two things: (1) a political basis for united action in Southeast Asia that allows for the specific interests of all participating nations, including Britain; and (2) a basic change in France's Indo-China policy, which involves acceptance of the fact that French colonialism is finished there.

With these steps, Dulles has stiffened the Western alliance in Geneva. There's evidence of this in the U.S.-British-French agreement to stick to the demand that a ceasefire in Indo-China must come before a political settlement. So the odds are that if no compromise is reached in Geneva, the war in Indo-China will go on, with France as only one partner in an allied coalition led by the U. S.

There's a chance, of course, that the French National Assembly won't back a continuation of the war by France. Even if that happens and the Laniel-Bidault government falls, France wouldn't necessarily drop out of the war.

In a situation like this, elections would be inevitable and perhaps a caretaker government led by Bidault could carry on the fighting in the interim.

• **The Question**—In short, Molotov may soon be faced with two choices:

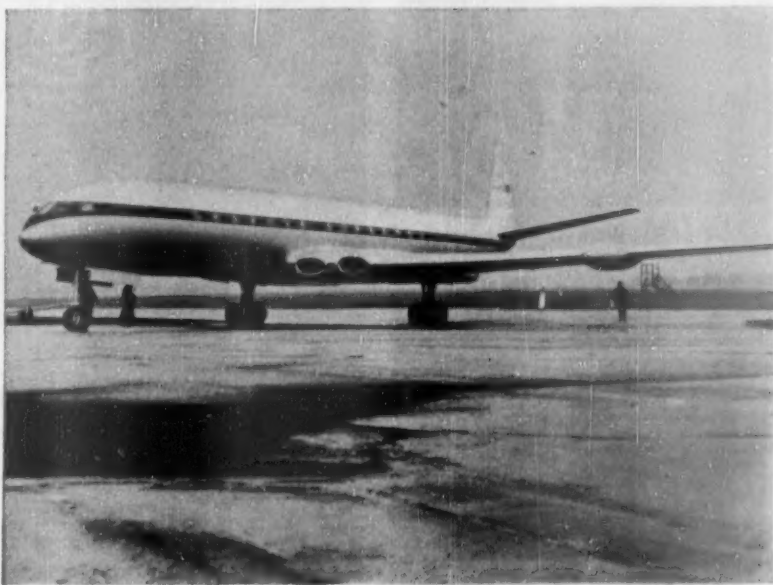
- He can accept the collapse of the Geneva Conference and bet on full military victory in Indo-China—even though that means risking war between the U. S. and Red China.

- Or he can accept a compromise that would involve real independence for Laos and Cambodia and some sort of modus vivendi between the Vietnamese Communists and the Vietnam nationalists.

The U. S. is ready to accept a compromise on these terms. Washington now isn't shooting for a complete military victory in Indo-China. But if Molotov chooses the military solution, our present limited objectives may go by the board.



## Boeing Jet Tops Schedule . . .



## . . . As New Comet Rolls Out Warily

The coincidental unveiling of the prototypes of the world's two newest jet transports within two days of each other last week points up the dramatic changes in the international race for jet supremacy. A year ago the British Comet I was proudly flying several scheduled routes and as far as the public knew, no U. S. manufacturer had got beyond the drawing board on a jet transport.

But last week, in Seattle, Boeing Airplane Co. rolled out—two months ahead of schedule—the prototype of its Model 707 (top picture), a four-jet, swept-wing

plane designed for either military or commercial use (BW—May 15 '54, p34). The first flight is expected within two weeks.

Two days earlier, at Hatfield, England, de Havilland rolled out its first Comet III prototype (lower picture). De Havilland, and Britain, still have great hopes for the Comet, but these will have to wait until the causes of the Comet I crashes (BW—Apr. 17 '54, p27) are definitely fixed.

Meanwhile, Boeing Airplane has taken a long stride for itself, and for the United States.



**HEARING:** Senate Banking Committee, headed by Sen. Homer Capehart (center), helped probe FHA-loan irregularities.



**IN** as acting FHA commissioner: businessman Norman P. Mason.



**OUT** in the wake of the scandals: old FHA boss Guy Hollyday.



**OVERSEER** Albert M. Cole, federal housing chief: He and Mason are charged with the job of tightening up FHA's operations. Meanwhile . . .

## Housing Rolls Along, Despite Scandal

A little over a month ago, the Federal Housing Administration tripped and fell into a sticky morass of scandal. For roughly a decade, the public was told, sharp operators had been making hay of various FHA loan programs. There were stories of exorbitant profits, hints of fraud, accusations of official laxity.

The immediate results of all this were two. First, the Administration dropped

several FHA officials from their posts—among them, some say undeservedly, Commissioner Guy T. O. Hollyday (picture). Second, the scandal slowed down the progress of the Administration's 1954 housing bill, which had just been passed by the House when the scandal broke.

The trouble might have been expected to bring on two other conse-

quences, too; but—judging by present signs—these consequences are not taking shape:

- The liberal provisions of the housing bill are not being killed. The Senate Banking Committee, which started work on the bill this week, is expected to revise it so that excessive profits and fraud will be choked off. Otherwise, Washington is betting that

the bill will remain fairly much as it stood when the House passed it (BW—Apr. 17 '54, p. 25).

- **The work of FHA offices in the field is not slowing down very much.** Scouting around in the country's major cities this week, *BUSINESS WEEK* reporters found little evidence that the scandal has upset day-to-day operations. There is some nervousness about FHA's future—on the part of lenders, borrowers, and FHA men—but not enough to gum up the machinery.

- **Practices**—The celebrated FHA scandal last month (BW—Apr. 17 '54, p. 26) centered mainly on two types of sharp practice.

One type involved apartment buildings. Under FHA's wartime and post-war program, a builder was required to estimate how much it would cost him to put up a rental project. FHA would then insure a loan to the builder equaling 90% of the estimate. In some cases, the government now charges, builders overestimated costs by huge amounts. There were ways in which the builders could make big savings in taxes and pocket vast amounts of cash.

The second type of practice involved "Title 1" loans for home improvements and repairs. A contractor or dealer would convince a homeowner that he needed \$1,000 worth of work done somewhere in his house. The homeowner would agree, knowing (as did the contractor) that it would be easy to get an FHA-insured loan at the local bank. The contractor would do the work at a cost of \$800, and pocket the \$200—an unduly large profit.

- **Bill**—In revising the housing bill over the next few weeks, the Senate Banking Committee is sure to throw up some barricades against these practices.

Acting FHA Commissioner Norman P. Mason, working with housing chief Albert M. Cole, this week sent the committee recommendations for barring "windfall profits." The committee will probably accept many of Mason's ideas.

It will probably write in a provision requiring builders of apartment developments to certify that actual costs equal or exceed the estimates on which FHA-insured loans are based. And it may require banks or other lending institutions to certify the competence and honesty of any contractor or dealer doing work for homeowners who borrow under the FHA program. It will probably require the contractors and dealers themselves to certify fair value for each improvement or repair job.

Aside from that, the housing bill will probably go through pretty much as the House left it. The bill now contains these liberalizing provisions:

- The President is given authority to reduce down-payment requirements on FHA-insured mortgages, and to in-

crease the permissible maximum term from 25 to 30 years.

- **FHA terms for new houses are extended to cover existing houses.**

- The housing agency is allowed to guarantee repair and modernization loans for as much as \$3,000, with terms as long as five years. The present limit is \$2,500 for three years.

The Senate committee may balk at this last provision, and it is likely to kill one other provision passed by the House—allowing \$200 down payments and 40-year loans for families displaced by slum clearance. But this week it proved more generous than the House in another respect: The President had asked, and the House refused, authority to build 35,000 public housing units a year for the next four years. The Senate committee voted to restore all the authority of the 1949 housing act—a total of more than 800,000 units.

- **Still at Work**—While these things have been going on in Washington, FHA offices out in the field have been quietly continuing their daily work. Banks and builders in almost every city express confidence in the particular FHA office with which they deal.

"It's quite surprising," says a report from St. Louis, "to hear the bankers, real estate officers, and officials of other lending institutions leap to the defense of the local FHA office." A Buffalo (N. Y.) builder feels the same way: "We have had an unusually good office here right from the start."

There's little evidence that either FHA offices or big lenders are checking loan applications any more nervously than they used to. "FHA inspectors have always been careful," says a Birmingham (Ala.) mortgage company official. Add a banker: "We've always checked. We can't do more."

- **Slowdown**—Here and there across the country, however, you find instances in which the FHA scandal has slowed things down. A mortgage company in Philadelphia reports that nervous FHA officials are "asking a million and one questions" about loan applications. A real estate man in Albany, N. Y., says the FHA officials' "routine is definitely being interfered with."

Contractors and dealers are having trouble here and there, too. "When you mention FHA loans to prospects now," says one broker, "people are scared off."

And, occasionally, you hear reports like this one from Boston: "One businessman says that builders have talked about discontinuing business with FHA in order not to be involved in any future investigations, and bankers have expressed the same desire."

These reports are not typical, however. Almost everywhere, FHA offices and lenders and builders have the same sign hanging out: business as usual.

## New UAW Role

**Union will take over and run Kaiser-Willys Toledo dealership, to help company get back on its feet.**

The United Auto Workers (CIO) Toledo Local 12 has cuddled up closer to Kaiser-Willys in an attempt to put the automobile manufacturer back on its feet. A few weeks ago, the local entered into a nearly unprecedented agreement to reduce some wages temporarily to enable the company to produce at competitive costs (BW—Apr. 24 '54, p. 144). Now it has carried its co-operation into the sales field. It is preparing to take over wholesale sale of Kaiser and Willys vehicles in Ohio and operate a dealership in Toledo.

Behind the move are two arguments with a common base. First, the local says in effect, "All right, we've made it possible for you to produce more cheaply; but that does no good if you can't sell the cars, so we'll sell them for you where we have influence." Second, the local has long complained that Willys workers do not get a high enough discount from the present distributor-dealer, Laurel C. Worman, Inc.

- **Elementary**—The common base is the fact widely recognized in the auto business that a car manufacturer should have leadership in its home territory. The theory is that if your own employees do not think highly enough of their product to own it, you can't expect to convince others.

Accordingly, last week Tom Gray, chairman of the Willys unit of Local 12, and three other Toledo residents incorporated Ohio Services, Inc., with a proposed capitalization of \$1-million. Gray said that \$300,000 of the money would come from the Willys unit, reportedly from a surplus of \$525,000 in the employees insurance fund. Gray added that "civic leaders, officials and employees of companies that supply Willys, and other Toledo residents also have pledged financial support."

- **Union-Backed**—The local's venture apparently has the backing of Richard T. Gosser, UAW vice-president, who personally negotiated the new wage agreement with Kaiser-Willys' president Edgar F. Kaiser. A few weeks ago, Gosser privately referred to the distributorship deal and asserted that one individual alone was willing to invest \$200,000.

Early this week it was practically certain that Local 12's offer would be grabbed by Kaiser-Willys, as soon as the company and Worman could end their present arrangement.

## Tubeless Tires . . .

. . . are coming out of the luxury class. They may bow as original equipment on new 1955-model cars.

Detroit is playing close to the vest, but Akron is exulting openly this week over the prospect that some 1955-model automobiles will be brought out with tubeless tires as original equipment. The tire industry thinks it's on the verge of the biggest revolution since the cord tire came in 1921.

By fall, a prospective buyer may have a choice of cars equipped with the tubeless casings. Already there's Packard, offering an option at \$71 extra per set on its two highest-priced lines, the Patrician and the Cavalier. Packard reportedly is happy and may make the tires standard on next year's models. The company says 31% of buyers have elected the tubeless tires.

More important to volume, however, General Motors and Ford are said to be planning this type of tire on, probably, Chevrolet, Pontiac, Ford, and Mercury. Other companies will undoubtedly swim with the current.

• **Waiting Game**—Tubeless tires have been growing in popularity as replacement items, at premium prices. B. F. Goodrich Co. announced the first one in 1947, introduced it the following year. Firestone Tire & Rubber Co. came next—and ran smack into a patent suit brought by Goodrich. The suit is still awaiting trial, and Firestone is still selling tubeless tires.

Meanwhile, all the other major tire companies were working on tubeless tires, marking time until volume got up to a level that would make mass production attractive. Up to now, probably only 4-million to 5-million tubeless tires are in use, out of about 180-million tires, not counting spares.

Auto makers were marking time, too. They were waiting for (1) popular demand and (2) a product at standard original-equipment price.

• **Ice-Breaker**—The ice may have been broken by the new Royal 8, brought out this month by U.S. Rubber Co. at the same price as a standard tire and tube combination. The Royal 8 is also offered in a model that uses the conventional tube.

U.S. Rubber is the principal tire supplier of the five General Motors divisions. Along with Firestone, it has been supplying Packard with its optional-equipment tires.

At the moment, Goodyear Tire & Rubber Co. and General Tire & Rubber Co. are the biggest companies still out of the market, though they have

experimental models. Goodyear, particularly, has been critical of the tubeless tire principle. However, as sole supplier of all Chrysler divisions, it may be forced into the field fast.

• **New Idea**—The principle of relegating the inner tube to the swimming hole is regarded in Akron as the most radical change in design since rubber-treated cord replaced fabric in the tire carcass 33 years ago. That change just about tripled tire mileage; the old fabric casings yielded only 3,000 or 4,000 miles.

The next big step was the balloon tire, with less air pressure and a softer ride. That also came in the 1920s. After the war, even fatter, softer tires came into use. And the original cotton cord gave way to rayon and, more recently, nylon. Now comes the tube-

less tire, billed by its makers as easier-riding, safer from blowouts and punctures, averaging 32,000 miles of service.

• **The Difference**—Tubeless tires don't look very different. They have a butyl rubber liner, sometimes a fluid sealant under the tread to close punctures automatically. Because they are free from friction between tube and tire, they reportedly run cooler, which helps extend service life.

Tubeless casings are harder to make, though (BW-Apr. 4 '53, p41). Processing of each tire as it is molded is trickier and takes longer. Tire companies say this extra production cost can be spread painlessly, however, as soon as volume gets up toward the figures for standard casings.

## Firestone Loses Its Voice

Monday night TV show is a casualty of the tug of war between nets and advertisers for control of programming.

The Voice of Firestone television show is going to be stilled—at least as far as National Broadcasting Co. is concerned. The show is going off NBC on June 7, apparently a victim of the quiet struggle between the networks on one hand and the advertising agencies and sponsors on the other for the control of television programming.

The half-hour light music show (Mondays 8:30 to 9:00 p.m.) has been on NBC radio or TV for the past 25 years. It's going off now because the network wanted to put a new show in the 8:00 to 9:00 slot on Monday nights. The replacement, to go on this fall, is the new Sid Caesar show. NBC offered to give Firestone a Sunday night spot, but Firestone wouldn't buy it.

• **The Fittest**—What it is trying to do, says NBC, is to build up its Monday night programming, in which Firestone is an obviously weak link. The Voice's Nielsen rating is only about 16, and in some markets, where there is more than one TV station, it sinks as low as 6 or 7. An NBC spokesman says it has been going "down, down, down" as more and more multiple station markets have come into being.

By contrast, Arthur Godfrey's Talent Scouts (over Columbia Broadcasting System) opposite the Voice, has a thumping 45 rating.

But Firestone is happy and NBC gets its money for the time. In fact, Monday evening is sold out on NBC's television network. Why, then, should NBC give a hoot whether Firestone has a rating of 6 or 60?

It wouldn't have cared much in the old days of radio broadcasting, when a sponsor paid his money and took his choice.

• **Downfall**—What Firestone has bumped into is the Sylvester L. Weaver theory of network responsibility over programming. The new president of NBC is a firm believer in the thesis that the network, not the advertiser or the ad agency, should build, own, and control shows. Weaver is now famous for his so-called "magazine" concept, which has produced such shows as Today and Home—large, long shows shared by several advertisers.

How else, asks Weaver, except by spreading the costs, can television be paid for?

• **Counter**—NBC is attempting to build up a strong Monday program with which to counter CBS's powerful lineup that evening—Perry Como, Burns and Allen, Talent Scouts, I Love Lucy, Red Buttons, Studio One.

To combat this, Weaver is building up Caesar (for which there is one sponsor so far, two to go) and something new called Spectacular. This, truly spectacular, will air every fourth Monday, preempting Caesar, and run for 90 min.

The show will be built along the lines of the famous Ford anniversary TV show. Leland Hayward, who produced South Pacific, will produce Spectacular.

Once you turn your dial to NBC, Weaver wants you to keep it there. He doesn't intend to give any free rides to weak shows that pick up an audience from surrounding strong shows.

Meanwhile, another network—probably American Broadcasting Co., according to the betting in the trade—will pick up a nice half-hour network show called the Voice of Firestone.

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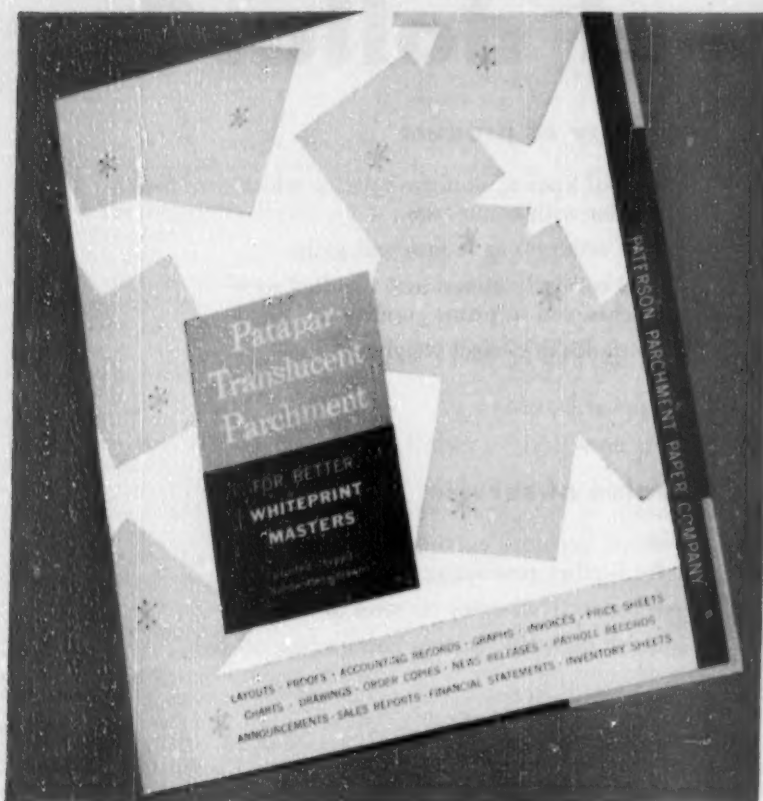
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## BUSINESS BRIEFS

The antitrusters had a busy time this week, in and out of court:

**In shoe machinery,** the Supreme Court upheld antitrust charges against the giant United Shoe Machinery Corp. In effect, United must offer to sell machinery that it now only leases and to stop making and selling some supplies.

**In milk distribution** the Justice Dept. won a partial victory over four big dairies: Borden, Bowman, Belmont, and Ridgeview Farms. The Supreme Court upheld a Chicago district court rejection of monopoly charges against the four, plus one other company. But the court left the door open for future charges of discriminatory pricing.

**In citrus fruits,** the Federal Trade Commission overruled an examiner's decision to drop a price fixing complaint against the Florida Citrus Mutual. FTC did not rule on the merits of the charges, merely ordered that they not be dismissed.

**Atom on the West Coast:** Five private utility companies in the Pacific Northwest have reached an agreement with AEC for pooling their technical skills to study the possibilities of nuclear power. The five are the same group that earlier agreed to incorporate the Pacific Northwest Power Co. as a joint effort to expand hydro power (BW—May 15 '54, p. 106).

**N. Y. Central management** suffered a setback in its fight against Robert R. Young this week. The Interstate Commerce Commission rejected a Central request that Young and his backers be barred from taking over the road without ICC permission.

**Local unemployment trends** can be spotted more readily, now that the Bureau of Employment Security is issuing its reports on jobless insurance payments every month instead of six times a year. The BES reports on payments in 145 major industrial centers are an important indicator of conditions, though they deal only with actual payments.

**Institutional buying** made up one fourth of all the public transactions on the New York Stock Exchange between Mar. 17 and Mar. 24, according to a survey released by Big Board president Keith Funston. It was the first hard figure made public on the size of institutional buying, generally considered a market stabilizer.

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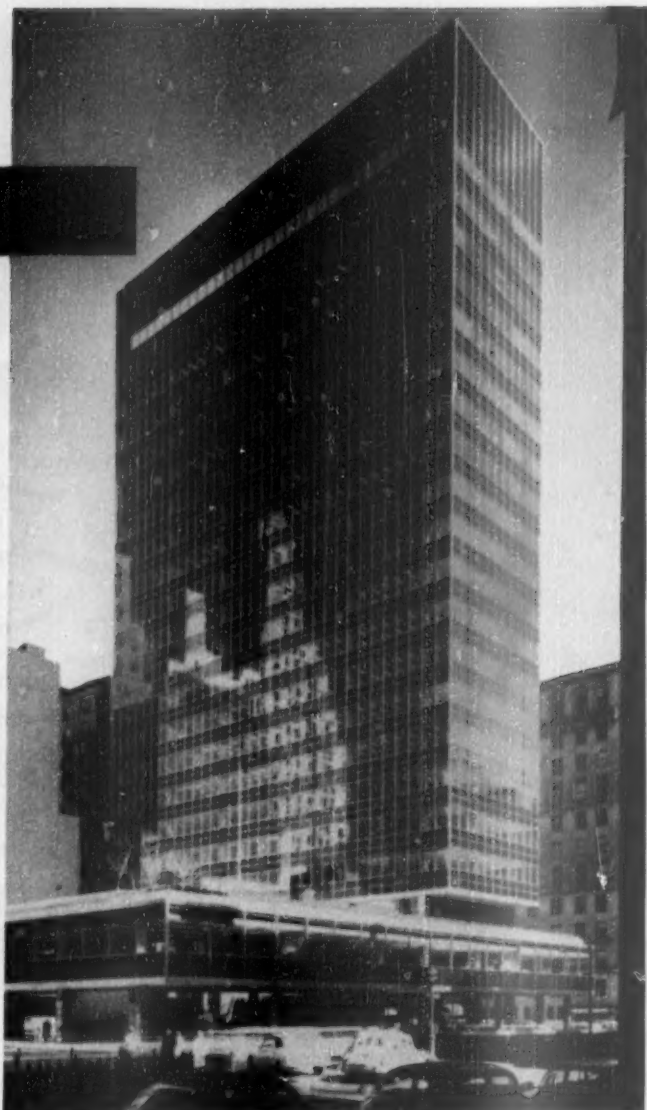
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*Heating and Air Conditioning Contractors:*  
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*Plumbing Contractor:* GILLMAN-ROUS-PECE CORP.

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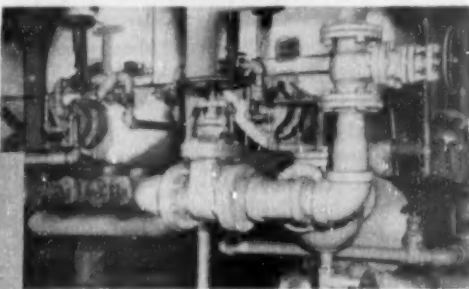
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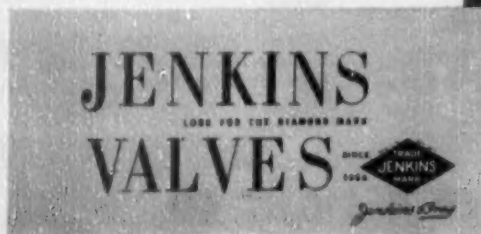
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# WASHINGTON OUTLOOK

WASHINGTON  
BUREAU  
MAY 22, 1954



Washington feels more confident about the business outlook, short-term. Eisenhower is being told by his advisers that the slide-off has hit bottom, at least temporarily, and that summer will show a leveling out.

Industrial production has stopped slipping. The Federal Reserve Board index, 123 in March, held steady in April. Ditto thus far in May.

The new strength is in consumer durables, where the slide was sharp. Increased auto output has been a major factor. But for that very reason some economists limit their optimism to the short-term: They fear autos can't keep up this pace.

War is the big uncertainty in the picture. Official feeling is strong that Southeast Asia must be protected from Communist domination. In fact, the feeling is so strong that Washington is willing to risk a shooting war—one that might start small and end big. The drift is toward intervention, which is something you shouldn't lose sight of in making advance plans.

Some business implications of involvement can be anticipated now, not in detail, but in general terms.

There's slack in the economy—more than in 1950 when Korea flared up. And the production machine is bigger. Industrial output today is some 10% off from the 1953 peak.

Steel is a good example. In 1950, capacity was 100.5-million tons. Today it is 124-million, with only about 70% of it in production.

A big defense step-up could be absorbed without any real pinch. Washington defense planners are always figuring on how much more demand for arms the economy can take without creating shortages and inflation. Right now, they figure \$10-billion, maybe even \$15-billion. A weakness in these calculations, however, is the inability to guess the reaction of the public. Threats of new shooting and more arms spending could set off a buying splurge. It might be temporary, but odds are it would put strong pressure under many prices.

Would controls be reimposed on wages, prices, consumption, materials? No, not if it's a small war. But that raises another question.

Could Indo-China fighting be limited, as in Korea? You can't be sure. The official gamble is that the Reds (Russia and China) will stay out and not force a World War III showdown. But it's a gamble.

Full mobilization plans are being blueprinted. Remember, though, that this is not specifically tied to Southeast Asia. It goes on all the time, as a part of preparedness. If we do get into the shooting, even if it's small-scale, Washington will call many businessmen back to government.

Would Congress O.K. U.S. intervention? Odds are that it would approve. The form, however, would have a great deal to do with the vote. Today there would be extreme reluctance to vote a declaration of war. But there's little or no thought of that, for it would mean the U.S. going it alone. The more likely strategy: Southeast Asia pact, which Congress would O.K. The terms of the pact would leave the President free to do whatever he finds necessary to support this agreement. That way, Congress would not be called on to vote directly on a war issue.

Looking further ahead on business, and leaving war aside, advisers to

# WASHINGTON OUTLOOK (Continued)

WASHINGTON  
BUREAU  
MAY 22, 1954

President Eisenhower think they see the makings of a future upturn.

**Emphasis is put on tax reductions**, which this year will leave individuals some \$4-billion more of spending money and corporations \$3-billion.

**Public works spending is on the rise**—about \$2.5-billion extra from the federal government in the year starting July 1, plus a boost of nearly \$2-billion by state and local governments.

**Social security payments will climb** some \$1.5-billion under the plans proposed by Eisenhower. But social security tax increases will offset part of this.

**Then there's the housing program.** The figuring is that it will add close to \$5-billion to public and private spending in this field.

**On top of it all is the "new climate"**—the friendlier attitude toward business, backed up by the tax proposals intended to encourage business to invest. There's also the fact that war or no war, the Pentagon is no longer cutting its defense spending as it did in the past nine months.

—•—  
The timing of a new upswing is uncertain, of course. It could come this fall, which is what the Administration hopes. And it could be delayed until next year. There's a political factor that is hard to figure. It's this: A Democratic victory this fall would put a chill into Eisenhower's "new climate." It could well bring on a hesitation about expansion plans. But the thought is that this would be temporary.

—•—  
A change in five-year defense amortization is in the works. It would benefit many companies that couldn't qualify in the past.

**The test heretofore** has been whether capital outlays expanded capacity for essential defense products.

**The new test may include modernization.** Officials feel this would help maintain the mobilization base—keep the machinery up to date.

—•—  
There's a fight on to save the Texas City tin smelter. The government planned to scrap this \$11-million facility. But Sen. Johnson of Texas, the Democratic leader, has persuaded the Senate preparedness subcommittee to hold hearings on a proposal to keep the smelter going for another year. Johnson may win, with Indo-China as his argument. There's politics, too—the GOP position in the South.

—•—  
**The McCarthy-Army hearings will be resumed.**

**The Democrats won't let the GOP off the hook.** They played a leading part in forcing Eisenhower's order on what officials can and cannot talk about. They wanted to know the inside of the Justice-Army-White House conference that led up to the charges against McCarthy. Now they will charge "whitewash" if the hearings aren't resumed.

—•—  
**There will be resistance to the antisegregation decision** (page 25), and it likely will be years before all states and communities accept it. The Supreme Court took note of the problems that will result and will allow a transition period. Once segregation is ended in the schools, it will become increasingly hard for unions and employers to live with any color lines they have drawn.

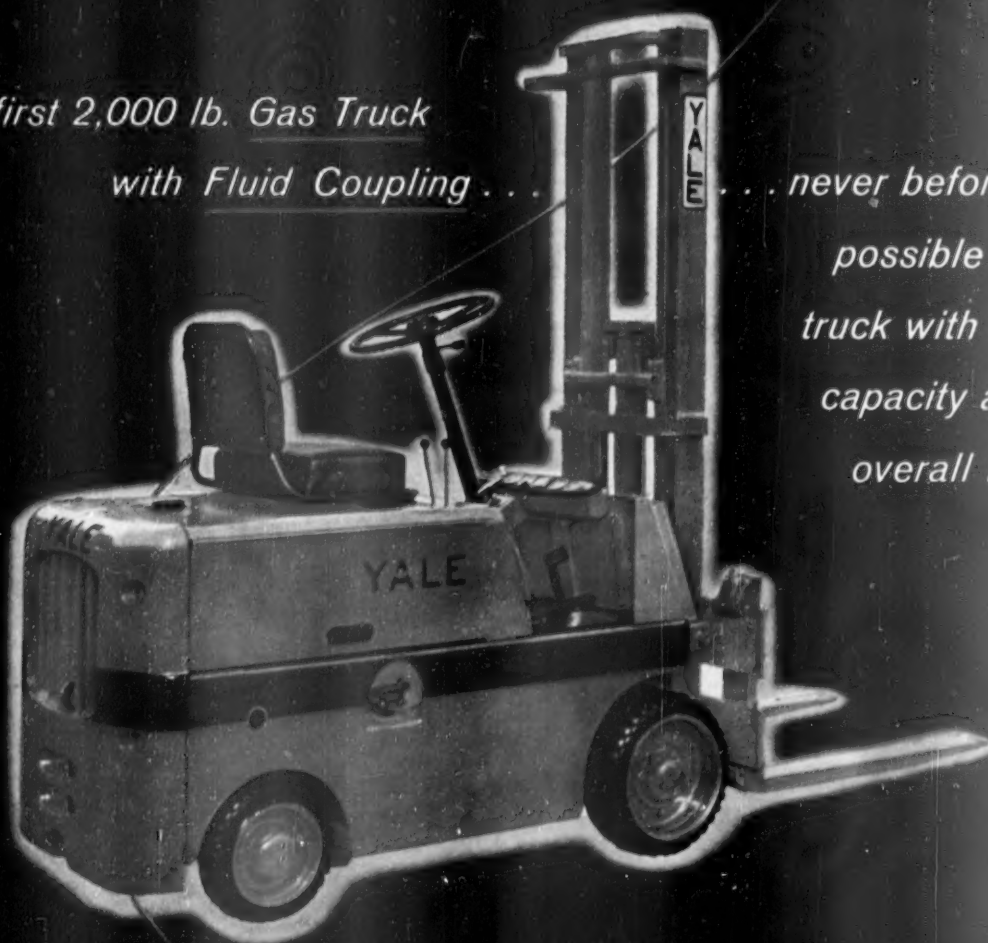
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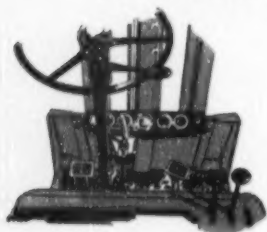


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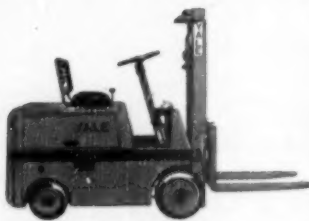
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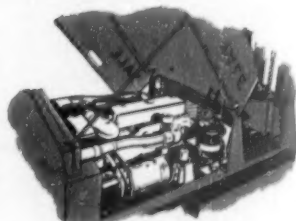
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# MARKETING

## Battle of the Toothpaste Additives

● Ammonia, chlorophyll, anti-enzymes, and now antibiotics: Every manufacturer has tried to make its own brand different from other brands.

● The battle shapes up as a gigantic, expensive struggle between drug companies and big soap companies.

● Where it will end is anybody's guess. At least one company is said to be turning back to plain, white toothpaste that simply cleans teeth.

The typical U.S. citizen is no longer satisfied with a toothpaste that merely cleans his teeth. He demands something extra. The toothpaste he buys must neutralize acids and enzymes, kill microbes. It must protect his enamel and sweeten his breath. It must contain exotic chemicals with strange-sounding names.

This attitude is largely the result of fierce competition among the dentifrice manufacturers. Each manufacturer has tried to make his brand different from, and better than, the brands of competitors. The toothpaste industry today is the scene of a furious race to invent more miraculous additives and more startling properties.

The additive battle got hot in 1949, when ammonia was added to toothpaste to improve its cleaning properties. Then came chlorophyll, advertised largely as a deodorant. Then there were chemicals said to neutralize harmful enzymes. Next came detergents.

Now Lever Bros. Co., maker of Pepsodent, is heading off in another direction. The company is test-marketing a new brand of toothpaste called Shield, which contains an antibiotic drug. And Bristol-Myers Co. (Ipana) has set up a big laboratory in New Jersey to search for still more additive possibilities.

• **Market**—This battle is being fought for big stakes. It is estimated that dentifrice sales last year totaled about \$150-million. This figure was estimated 5% higher than 1952's figure, and all the signs point to even bigger sales in 1954.

The market is expanding continually, largely because the population is growing. Every new baby represents a potential set of teeth. And the chances that these teeth will eventually be brushed are better than they used to be, for the practice of toothbrushing is becoming more and more widespread. Furthermore, toothpaste is now being sold

in supermarkets in heavy volume, thus increasing the market through more outlets.

Still another factor is pushing toothpaste sales up. Every time a new additive is announced, many a tooth-conscious citizen walks right down to his drugstore and buys himself some—even though he has not yet finished his old tube. When new additives come along fast, and when they are skillfully advertised, a good deal more dentifrice is bought than is actually used.

• **Lineup**—Because the market is so lucrative, competition is rough and often bitter. It is more than merely a fight among manufacturers; it is a gigantic struggle between two factions: drug companies and soap companies.

Drug companies made the first toothpastes to be marketed on a big scale, toward the end of the 1800s. Then the soap companies (known in the trade as "soapers") moved in. The soapers, with their knowledge of mass merchandising, their willingness to spend huge sums on advertising and promotion, and their experience with bitter competition, eventually took the lead.

Because toothpaste competition is so keen, sales figures are kept under lock and key. But a generally accepted trade estimate puts two soap companies in two of the top three places in dentifrice sales. Colgate-Palmolive Co. is first, with 40% to 45% of total industry sales. Lever Bros. comes after, with 10% to 20%. Then two big drug companies: Bristol-Myers Co., with 12-15%; and Block Drug Co., with 10-12%.

Procter & Gamble Co., which ranks with Colgate and Lever Bros. as one of the "big three" soapers, is now trying to join the other two as a high-ranking dentifrice maker. Procter's Gleem, featuring a detergent, is the company's first really serious effort to bite off a

big piece of the toothpaste market. Procter is reported to be pouring something between \$15-million and \$20-million into promotion of Gleem.

• **Additives**—It was Block Drug Co., fourth on the list of estimated industry standings, that started the current frantic search for additives. In 1949, the company—then a newcomer on the dentifrice scene—introduced Amm-I-Dent. This toothpaste contained ammonia, which was advertised as being able to make teeth whiter. Amm-I-Dent enjoyed huge success.

Noting this, Bristol-Myers ammoniated its Ipana. The race was on. For a while, toothpaste ads talked of hardly anything but ammonia.

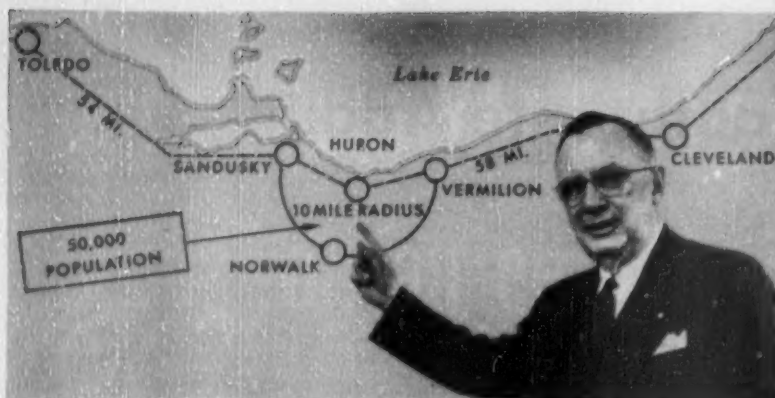
Then chlorophyll oozed onto the scene. It had been introduced into toothpaste experimentally as far back as 1948, but nobody paid much attention to it for a long time. Finally, the green substance caught the public's fancy. It boomed in 1952 (BW—Apr. 26/52, p165). Toothbrushes all over the country turned a delicate shade of green.

Toward the end of 1952, chlorophyll began to lose its charm. Today, several manufacturers are cutting prices of chlorophyll toothpastes to shore up sagging sales, and some blame chlorophyll for financial losses.

• **Into the Breach**—But anti-enzymes have jumped in to take chlorophyll's place. They were introduced on the market last summer, following a series of experiments at Northwestern University (Evanston, Ill.). Scientists at Northwestern had found two chemicals that would help neutralize cavity-producing enzymes in the mouth. Toothpaste companies needed little urging to capitalize on these experiments.

First on the market with one of the Northwestern anti-enzymes was Lambert Pharmaceutical Co., maker of Listerine. Lambert called its new dentifrice Listerine Antizyme. Colgate came in not long afterward with Gardol, trade name for the other Northwestern chemical. Today, every important toothpaste maker plugs anti-enzymes or ingredients with similar properties. Trade observers figure these chemicals are here to stay for a long time—partly because the anti-enzymes have some medical support, partly because so much money has been invested in them.

Toward the end of last year, so-called "surface-active" detergents began to make a name for themselves. These



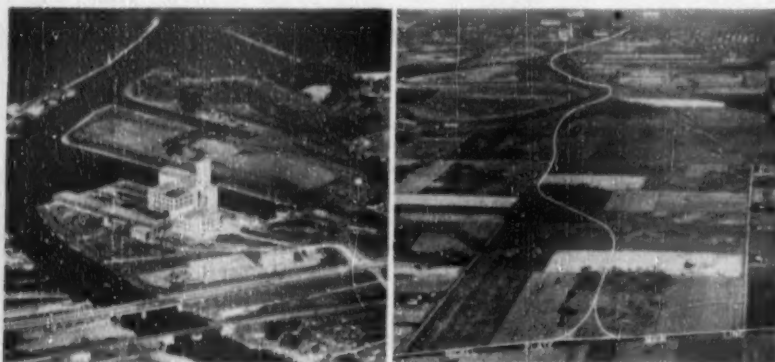
H. H. Hampton, Vice President  
Industrial Development, Nickel Plate Road

## We have plenty of water

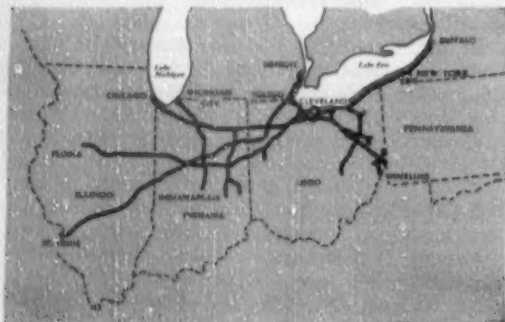
There is enough water to meet any industrial demand at Huron, Ohio, midway between Cleveland and Toledo on the south shore of Lake Erie at the mouth of the Huron River. It is an area worth investigating as a location for a new plant.

The Ohio Edison Company serves the territory with electric power through a 132,000 volt and a 34,500 volt transmission line. The Ohio Fuel Gas Company has a 16-inch natural gas line adjacent to the industrial area.

Huron has a 50,000 population within a 10-mile radius and is a progressive, well balanced community with excellent educational and recreational facilities.



The Huron Harbor, which has fine dock facilities to accommodate Great Lakes freighters, is on the main line of the Nickel Plate Road, noted for its High Speed Service.



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For detailed information about the Huron area or other sites along the Nickel Plate Road, call or write Mr. H. H. Hampton,

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"... in the rough-and-tumble development of additives, companies became nervous about names ..."

TOOTHPASTE starts on p. 41

detergents belong to the same chemical family as dishwashing and laundry detergents; they are said to give teeth the same kind of protection as anti-enzymes. Bristol-Myers' Ipana now contains a detergent; so does Procter & Gamble's Gleem.

• **The Name**—During this rough-and-tumble development of additives, companies have become somewhat nervous about names. Which is more important—the established brand name, already accepted by the public; or the name of the additive?

Colgate has kept its brand name inviolate—Colgate with Chlorophyll, Colgate with Gardol. So has Bristol-Myers; its Ipana toothpaste, jazzed up with both ammonia and chlorophyll, ended up with the name Ipana A/C. Lever Bros. put out a new brand called Chlorodent, but stayed on the safe side with a second brand called Pepsodent with Chlorophyll. But Lever's new Shield doesn't carry the Pepsodent label.

• **Wounds**—The worry over names is not the only unhappy byproduct of the additive race. There are other, more unpleasant, side effects.

The race is tremendously expensive, for one thing. For another, it has drawn growls of disapproval from medical men and from government agencies charged with watching activities in the field of drugs. The American Dental Assn., for instance, has sharply chided several big manufacturers—accusing them of misleading advertising. Many medical men, too, are leery of any overuse of antibiotics; these are powerful drugs, and even doctors use them with great care.

• **Coming**—It is hard to tell whether dentifrice makers will take these chidings seriously. At least one trade observer believes the additive battle will continue unabated. "What's next?" he muses. "Radioactive ingredients?"

But there are signs pointing the other way. Plain, unadorned, white toothpaste has been selling well even in the midst of the chlorophylls and anti-enzymes. And Bristol-Myers, which has drawn the wrath of the dental association for some of its advertising, is reportedly playing with the idea of relaxing its emphasis on additives. Ipana promotions may soon tell the customer merely that the toothpaste (1) cleans teeth and (2) tastes nice.

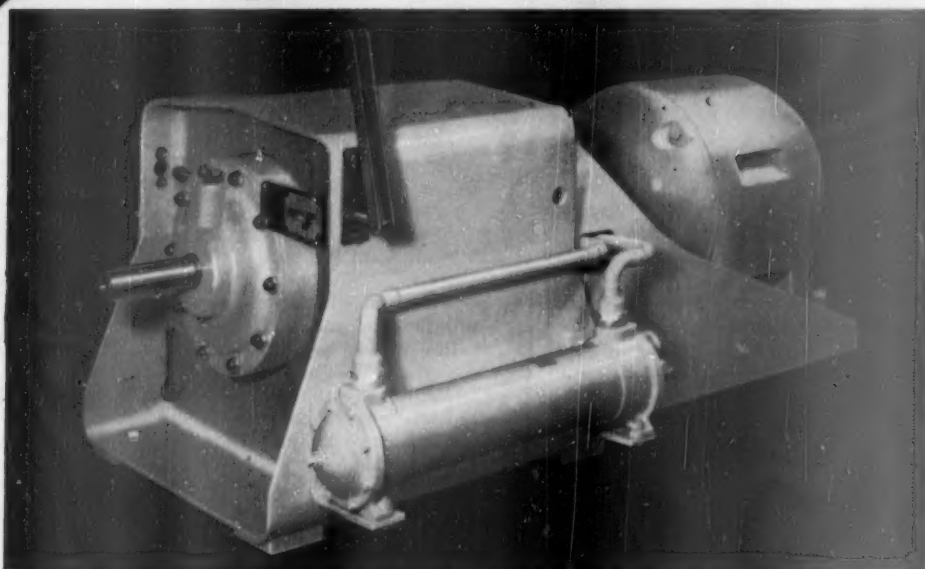
Thus, the toothpaste industry will have come full circle.

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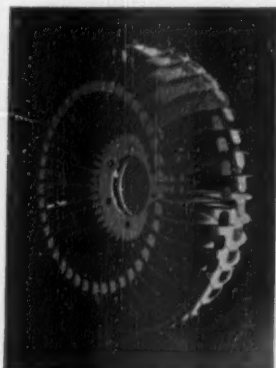
## FLUID DRIVE

TYPE VS CLASS 2



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A phantom view of the driving and driven members, which provide smooth, reversible power transmission.

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For complete information about the Class 2 Gýrol Fluid Drive, give your nearest American Blower Branch Office a call, or write us for Bulletin 9419.

For smaller applications the Type TM Constant Speed Gýrol Fluid Drive is available in ratings from 1 to 20 h.p.

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## THE MARKETING PATTERN

### The Auto Dealer: Old, Tired, and Baffled

**I**N SOME QUARTERS, notably Detroit, it is now a game to try to find someone who has been phoned or called upon "cold" by an auto salesman. Reports from auto shows throughout the country have a common theme. The "salesman" gives the "prospect" a card and suggests he keep in touch, but the salesman doesn't take the prospect's name or address. Automotive News recently sent a reporter around to Detroit showrooms; at 14 stops he was asked only three times for his name; at all but one place, the sales pitch was built solely around a price discount.

What's the matter with today's car salesmen and dealers? Why don't—or won't—they take their feet off the desk and start selling?

Detroit has some answers. It thinks it knows what's the matter, and it thinks it knows how to handle the problem.

**T**HE CLASSIC answer is that dealers are either too old or too young for today's challenge. Dealers who were in the business before the war and are still in it today are wealthy men by and large, and most of their wealth was piled up in the postwar years. They are the aggressive men you remember from the 1930s, but age has tempered their aggressiveness; they still know how to sell, but with the average profit of new car dealers now down to 0.8% of sales, they just see their business eating into their bankrolls.

On the other hand, the dealers and salesmen who came into the business after the war have never seen anything like today's situation. They are used to sitting in the sales room waiting for the traffic.

There have been very few salesmen developed in this country since the late 1920s or early 1930s. That's true of all retail selling—not just the auto business.

In the past year or so, the auto manufacturers have finally recognized the situation. They have renewed intensive sales training programs for dealers and salesmen.

**T**HE TROUBLE with the classic explanation is that you can append to it the classic rejoinder: It's all right as far as it goes, but it doesn't go far enough. It misses a major point: There has been a ma-

jor change in the market, and this change may in turn mean that selling methods must be changed to meet it. In other words, even if the fire-eaters were eating fire, that wouldn't be enough.

The market the old-timers grew up in, the market of the late 1920s and early 1930s, was a big one then, though it looks narrow when compared with today's. There were 20-million passenger cars in use as against nearly 45-million today—that's a twofold increase, compared with a 25% increase in population.

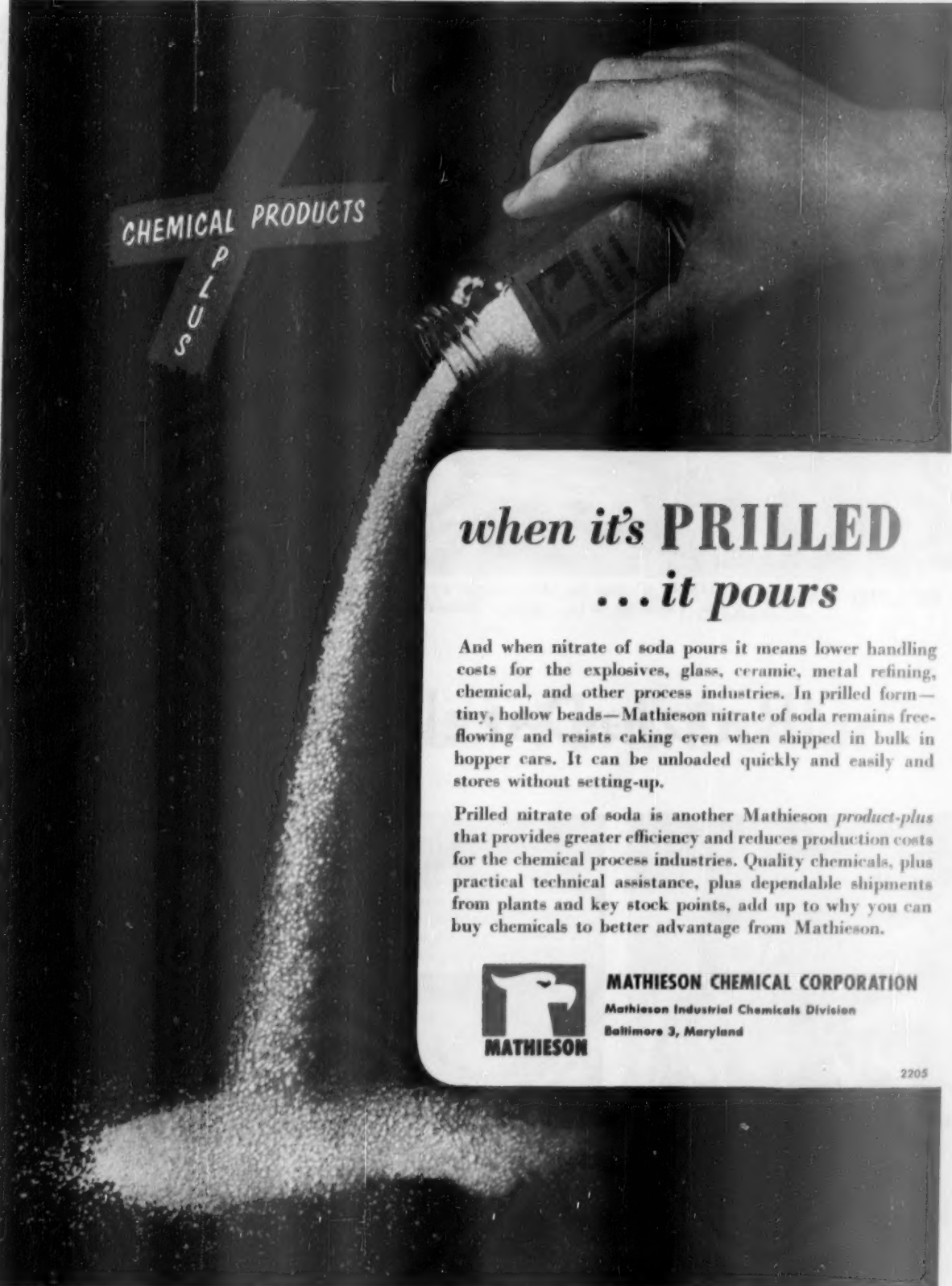
In the 1930s, salesmen were still selling the idea of car ownership to a lot of people. With one eye on the condition of roads, they were also selling endurance and performance. At the same time they were selling in an age when brand loyalty was still a major factor. It was in this age that the car salesman's great weapons—prospect lists and demonstrations—were forged.

Look now at today's market through the eyes of Hull-Dobbs Co., the free-wheeling dealers from Memphis (page 46). They've thrown away the prospect list. To Hull-Dobbs, everyone is a customer. The only problem is to find him at the psychological moment, when he's "ready, willing, and able," as the Hull-Dobbs phrase has it.

**D**ETROIT ITSELF has helped to change the ground rules. It has produced a highly standardized product, so uniform that you can hardly tell a mass car from a class car. In fact, the distinction has almost disappeared. As far as comfort and performance go, there are no Tin Lizzies any more—Ford sets the style.

Detroit is selling style—style and price. Buick has overtaken Plymouth for the No. 3 sales spot, thanks partly to its emphasis on style and partly to the fact that Buicks sell down in the Plymouth-Ford-Chevy price class. Yet Detroit complains that the dealer will sell only on price if and when he sells at all.

Perhaps what's wrong with the dealer is that he's not only old and tired—he's also frustrated. He doesn't understand today's market, so he just keeps his feet up on the desk while hustlers like Hull-Dobbs get the business.



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**ROUND 'EM UP** Hull-Dobbs' salesman Jim Miles appraises a parked car, leaves a note "I need this car for a prospect. Please call me at once."



**SIGN 'EM UP** Taken off balance, owner drops in at

## Razzle-Dazzle Selling Makes



**PARTNERS** Hull, Oakley (center), and Dobbs give recipe:



**PEP 'EM UP** "We stir up fresh business every day by having a well-paid excited sales force throwing exciting propositions to a lot of people."



office, discovers later that he has sold his car. Frank Liberto (above) checks deal.



**CHALK 'EM UP** The salesman who closes the deal gets recognition. Everybody in Memphis knows that H-D made another sale.

## Hull-Dobbs Biggest Ford Dealer



**SMARTEN UP** Liberto stresses company's motto.

The world is of several minds about Hull-Dobbs Co., the Memphis concern that describes itself as "The World's Largest Ford Dealer." Indeed, one of Hull-Dobbs' interesting attributes is its capacity to engender mixed and strong emotions.

There is the way, for instance, Ford Motor Co. views the largest of its dealer brood. Ford regards Hull-Dobbs with a mixture of respect for its accomplishments and misgivings about its size and power.

There is the way the customers look at Hull-Dobbs, particularly those who come up against the full Hull-Dobbs treatment for the first time. One such went around to see the concern's Memphis place, just down the street from the Peabody Hotel, with a friend who had some business to transact. The newcomer left minus his 1953 Plymouth and a check for \$985, driving a spanking new \$2,618.17 Ford Ranch Wagon. "He won't admit it," said the friend last week, "but he doesn't know what hit him yet."

Finally, there is the way that other

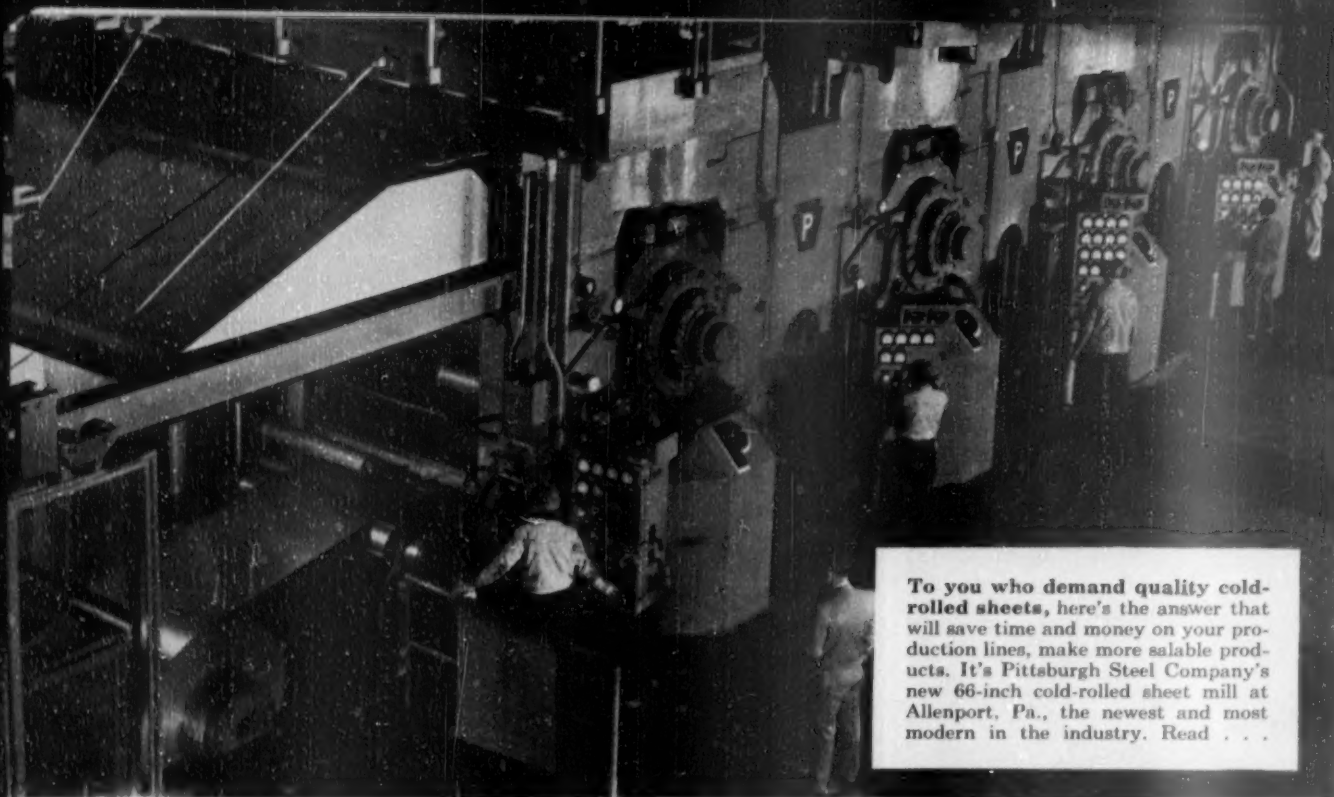
car dealers look at Hull-Dobbs. On one hand take the Ford dealer whose failing agency was put on its feet by Hull-Dobbs and who says, "Everything we are we owe to Jimmy Dobbs."

On the other hand there are the dealers—a lot of Ford agencies among them—who have come up against Hull-Dobbs competitively, and who dislike everything about the company and say so.

• **Master Minds**—The partners who are the objects of this adulation and abuse, Horace H. Hull, James K. Dobbs, and Oscar Oakley, think they understand what motivates people, particularly the rival car dealers. In a letter commenting on one of the most sensational business coups Hull-Dobbs has ever pulled, Horace Hull recently observed:

"My, how some of these dealers did criticize us and how very jealous they were, and they have never gotten over it."

Strictly on a day-to-day basis it would be hard for rival dealers not to develop a grudge against Hull-Dobbs merely on the score of sheer size. Though



To you who demand quality cold-rolled sheets, here's the answer that will save time and money on your production lines, make more salable products. It's Pittsburgh Steel Company's new 66-inch cold-rolled sheet mill at Allentown, Pa., the newest and most modern in the industry. Read . . .

## Six Good Reasons Why You Get More For Your Money When You Buy Cold-Rolled Sheets From Pittsburgh Steel

1. You get good steel to start with. Cold-rolled sheets are no better than the basic steel from which they are rolled. Pittsburgh Steel, in competition with other steel makers, has produced and sold millions of tons of steel ingots and slabs carefully made from their own selected raw materials for others to finish into flat-rolled steel, *without one complaint*. So they know how to make the kind of steel that fabricates more easily as hot

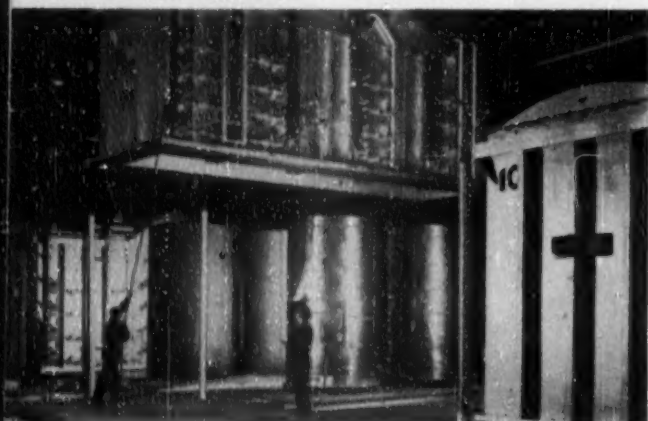
and cold-rolled sheets.

2. This new rolling mill is equipped with four stands weighing nearly 200 tons each to assure solid, rigid pressure on the rolls—reduce variation of gage. The electrical system for controlling mill speeds is technologically the most advanced in the industry. X-ray gage and other electronic devices control uniformity of sheet thickness and shape.

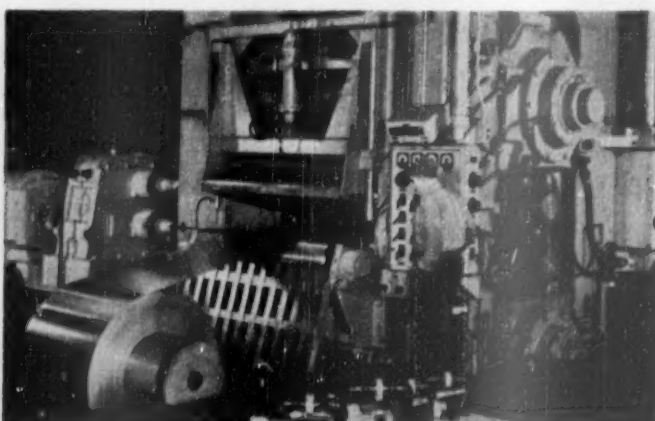
3. Pittsburgh Steel sheets have a bet-

ter finish because surface quality must start with good steel, properly hot rolled. Pittsburgh Steel's new hot-rolled sheet mill with its four-high reversing roughing mill and its four stands of four-high finishing mills imparts the proper internal grain structure and smooth surface, two important requirements for obtaining good finish and internal quality when steel is later cold rolled.

4. You get less breakage, higher yields



**Coils Stacked on Heavy Circular Bases** and encased in a round inner cover of steel plate are housed in one of the 12 portable annealing furnaces. Heating slowly and evenly and then allowing to cool restores ductility.



**Temper Rolling**—This 2,800 horsepower, one-stand mill makes only a slight reduction in the now ductile steel, gives a smoother surface, produces a flat and uniform sheet.



**Cold-Rolled Coils** weighing up to 60,000 pounds emerge from the mill. It took two years to plan, two more to build this new mill. It was designed with one thought in mind—to give you more of the desirable qualities in cold-rolled sheets.

with Pittsburgh drawing quality steel sheets because they are more easily formed, stretched and shaped. The reasons for better ductility are good physical structure of the steel, proper conditioning, cleaning, annealing, and expert rolling to exact tolerances on 1954-model equipment. Take a complicated shape like an automobile door panel for example. Feed finished steel sheet into the die on a high-speed press and it must have inherent quality to form a perfectly shaped panel that will fit and hinge properly and look attractive on the showroom floor.

5. Because of smooth finish, close tolerances and shape you have less grinding, polishing and finishing to do on your panel or section before fabricating and painting or enameling.

6. Because Pittsburgh sheets are rolled to order to fit your expensive dies perfectly, dies last longer, there's less down time required to cut and refinish those worn by sheets that vary in gage.

Total these six reasons and you can see why you actually get more for your money with Pittsburgh cold-rolled sheets.

Pittsburgh Steel does not claim to be the only producer of fine quality steel sheets in the country. The point Pittsburgh Steel makes is this:

If you must have the best quality cold-rolled steel sheets in the manufacture of your quality products, and you are faced with the job of making better products at lower cost, why not make Pittsburgh Steel back up what it claims for its new sheet mill. This new steel company with

an old name welcomes the opportunity to demonstrate what it can do for you.

There's another important reason why you should consider Pittsburgh Steel as one of your sheet suppliers and that's better service. This mill now in production was built to serve you. You now have another source of supply. It's the equivalent of an insurance policy against a return of premium prices in the event of shortages in the future. From the president right on down to the workmen in the mills, you'll find at Pittsburgh Steel a willingness and desire to help service an order.

If you use cold-rolled or hot-rolled sheets, strip specialties, or seamless tubular goods or wire products in the manufacture of the quality products you sell, there's a Pittsburgh Steel salesman near you. Chances are you know him. If not, he would like to get acquainted with you, your steel requirements and your production problems. A phone call, telegram, or letter to the office nearest you will bring him in a hurry!

*"Everything New But The Name"*

## Pittsburgh Steel Company

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Warren, Ohio. PLANTS: Monessen, Pa. • Allenport, Pa. • Akron  
Los Angeles • Unionville, Conn. • Warren, Ohio • Worcester, Mass.



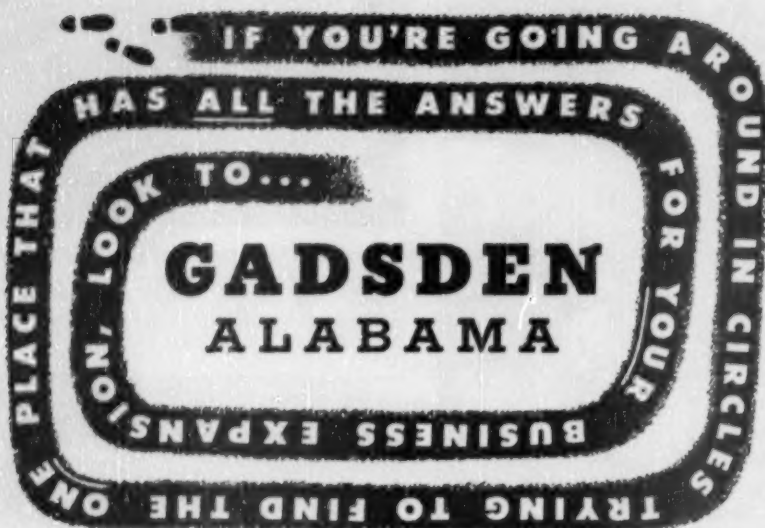
**For Those Who Order Narrower Widths**, coils can be slit on this new cold mill slitter line, or on the new slitter line for the hot mill. On this unit, wide coils can be slit down to widths as narrow as 2 inches.



**A Flying Shear** cuts coils of steel into individual sheets varying in length from 2 to 30 feet on one of the three new shear lines in the hot and cold rolling mills. Each sheet is individually inspected after it emerges from the reciprocating shear opposite the controls.



**Packaged to Protect It During Transport**, sheet from the hot and cold rolling mills goes out to customers across the country by rail, truck, or down the inland waterways by barge.



## LABOR?



## POWER?



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## RAW MATERIALS?



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Native labor, intelligent, compatible and easy to train, they're lovers of the land and the American way of life, they're industrious and prudent, whether your demand is for skilled or unskilled labor, Textiles or Foundry, clerical, managerial or professional you'll find them here in abundance. Yes, Gadsden has the answer to your problem.

## "GADSDEN'S GOT IT!"

What do you want for Power . . . COAL? Gadsden's in the very heart of the South's richest coal belt. WATER? In the water shed of the southern tip of the Appalachian Range, the Coosa River flows through the heart of Gadsden and furnishes an abundance of water for all purposes. GAS? Natural gas with an average BTU rating of 1,000 per cubic foot. ELECTRICITY? From the Coosa River the Alabama Power Company can furnish enough electricity to meet any of your needs.

## "GADSDEN'S GOT IT!"

A natural cross roads between the principal cities of the South. Gadsden is served by four railroads and seventeen truck lines. From the Gadsden airport six operating flights daily connect the Valley of the Coosa with the capitals of the world. Modern highways from Gadsden lead to everywhere! You can find your answer to transportation, in . . . Gadsden!

## "GADSDEN'S GOT IT!"

What are your needs? Iron, steel, aluminum, timber, coal, stone, manganese, shale, clay, cotton . . . just name it . . . Gadsden's almost sure to have it. Today in Gadsden the articles manufactured run from vitreous china ware to ranges, from cast iron pipe to automobile tires. Bring your needs to Gadsden, you'll find your answer here.

**GADSDEN**  
*Committee of thirty-five*  
**GADSDEN • ALABAMA**

" . . . one of the partners recently opened his own agency in competition with Hull-Dobbs . . ."

HULL-DOBBS starts on p. 46

Memphis is a city of only 430,000, the partners' dealerships there sell more Fords, more parts, and more service than any other Ford agency in the world. On top of this, they own a string of dealerships in other cities. The Hull-Dobbs-Oakley Supervision Service owns Ford agencies in Akron, Chicago, Cincinnati, Cleveland, Knoxville, Los Angeles, Louisville, Minneapolis, St. Louis, Winston-Salem. Then there is Hull-Dobbs Co. of Hawaii and Hull-Dobbs Co. of Puerto Rico.

Gross profits of these wholly owned agencies comes to some \$10-million a year. Hull-Dobbs agency alone did an over-all sales volume of \$10-million last year.

In addition, the Hull-Dobbs organization controls or partly owns another 31 agencies in various parts of the country, as well as several auto financing and insurance agencies.

But this isn't all. One of the partners, Oscar Oakley, recently decided to open up his own agency in Memphis in competition with Hull-Dobbs. The other partners made no open protest. The business done by the two agencies—Hull-Dobbs and the new Oakley Motor Co.—adds up to something that would make any dealer drool—or paw the air. In April, Oakley sold 207 new cars, 261 used ones, while the Hull-Dobbs Memphis operation sold 295 new ones, 264 used cars.

• **The "System"**—How do Hull, Dobbs, and Oakley do it? Well, there is a Hull-Dobbs "system" and it's developed to the degree that it can, in effect, be exported. The partners can use it to put other dealers back into the black, and the recipients of the system can in turn pass it along. George Moore, for example, the Washington (D. C.) dealer who declared that he owed everything to Jimmy Dobbs, and gave him a testimonial dinner and a bronze plaque to prove it, is now a partner in a managerial concern modeled along the lines of the H-D-O Supervision Service.

But above and beyond the system are the men themselves, who don't just let the system operate itself while they carry on their many extracurricular activities.

They are up to their ears in business, from dabbling in oil in Texas, Oklahoma, and Kansas to raising cattle. Dobbs owns and operates a string of restaurants. Nevertheless, the three pay close heed to their automotive enterprises. Oakley, for example, has been



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Groups of as few as 10 are eligible for Hardware Mutuals new *Comprehensive Medical Benefits Plan*. Let your friendly Hardware Mutuals representative explain this and other low cost plans that can be tailor-made to give your employees really adequate protection.

For his name and address, just call *Western Union*, ask for *Operator 23*. Do it today! His helpful services are yours for the asking!



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by other manufacturing  
methods.

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ground double enveloping  
worm and gear sets

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- Production quantities
- Interchangeability
- Accuracy of control
- Higher efficiency
- Economy of space and weight
- Special gear materials

# Vard

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known to stay on the job 20 hours at a stretch.

• **Big Deals**—Hull himself tells the story of their wartime venture, the one that made the company the object of other dealers' "criticism and their jealousy." After Pearl Harbor, when the freeze orders came thicker and faster than ever before, a lot of car dealers got worried lest they get stuck with an inventory of cars that couldn't be sold because there wouldn't be any gas or tires with which to run them. So they began unloading at cost all their cars. Hull-Dobbs, having "concluded the government wasn't going to break dealers," plunged into debt to buy these offerings. All told they bought 6,000 cars and trucks. "It was a most profitable venture," wrote Hull.

• **Personality Plus**—The Hull-Dobbs system in itself, aside from the personalities, is a lot of things bundled up into a profitable combination—things that car dealers have always done but the partners do better, things they have borrowed from other businesses, things they have invented themselves. The system is part religion, part business method, part a way of life—with profits as the final goal.

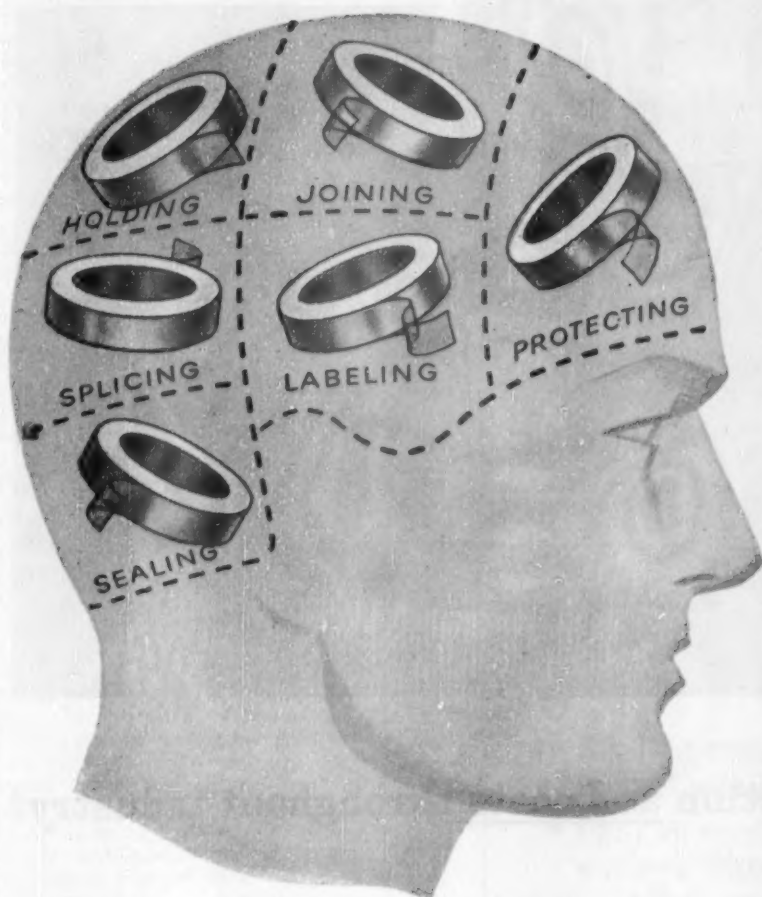
One of its tenets is economy. When the partners move in on a dying agency, they lay about them, firing the dead wood, cutting the salaries of the principals and making them get out and sell, slashing the overhead. In one case Dobbs even made the salesmen buy their own pencils. Practicing what they preach, the partners maintain a workmanlike, but not fussy, headquarters in Memphis. Dobbs won't tolerate "too many chiefs and not enough Indians."

Another major tenet is hard work—for everybody. Some Hull-Dobbs agencies stay open 24 hours a day, six days a week. In defending himself against the charge of having been one of the first dealers in the country to stay open 24 hours, Hull counterattacks by saying that "we are one dealer in the U.S. who has never operated his business on a Sunday." To which he adds, "We believed it was not morally right, that it was unfair to the organization, that it wasn't in the end a profitable thing to do."

• **Strait-Laced**—This touches on a major facet of Hull, who describes himself as the product of a "strait-laced Presbyterian family." He talks of Christ with reverence as the Itinerant Economist and dates his own success in business from the time he began to tithe. He urges all his managers to be churchgoers, insists also that they have a "satisfactory and healthy home life."

Where selling itself is concerned, his two partners are the missionaries, the ones who carry the gospel. When Dobbs goes into a shaky dealership one of the first things he does is to fill them

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**SEAL BOXES** efficiently with "Scotch" Brand Cellophane Tape and "Scotch" Brand Box Sealer. Tandem sealers apply strips of tape to each end of box as it passes between rollers.

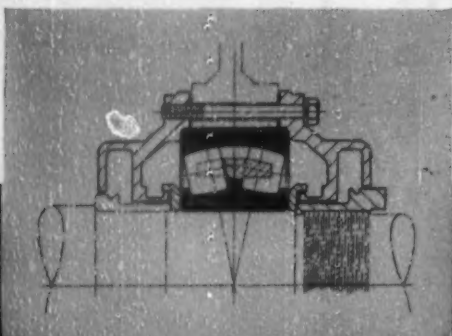


**JOIN PACKAGES** for special "combination deal" sales with "Scotch" Brand Cellophane Tape and "Scotch" Brand Combination Package Sealer. Machine handles  $\frac{1}{4}$ " to 1" tape widths; turns out up to 75 deals a minute.

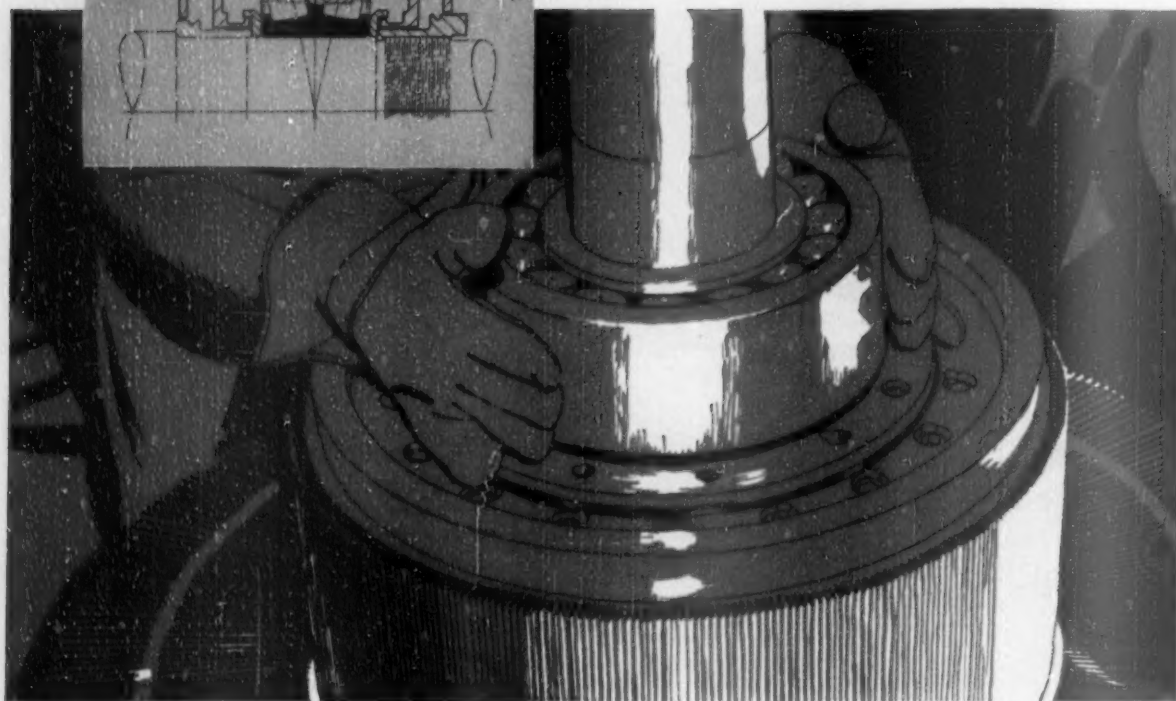


**APPLY AND PROTECT** labels easily and quickly with "Scotch" Brand Cellophane Tape. Here, 6" tape holds labels on bottles; protects against smudging, alteration, or smearing.

# TORRINGTON BEARINGS AT WORK



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Consider, for example, TORRINGTON Spherical Roller Bearings—and these big advantages.

*Precision-ground contact surfaces*—for even load distribution, maximum bearing life. *Accurate geometrical conformity between races and rollers*—for ultimate load carrying capacity. *Carefully heat-treated races and rollers*—for maximum resistance

to shock and wear. *Bronze, machined cage for each path of rollers*—for freedom of operation. *Integral center flange on inner race*—for positive radial stability and positioning for thrust loads. And *self-alignment*—for smooth service under shock loads at maximum speeds.

TORRINGTON Spherical Roller Bearings are available from stock with either straight or tapered bore for shaft or adapter mountings. Prove to yourself that it pays to buy the finest—specify TORRINGTON.

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# TORRINGTON SPHERICAL ROLLER BEARINGS

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full of fire with a pep talk. After that he has them talk price—and go out and sell. Enthusiasm is a major item in the Hull-Dobbs system, as witness this statement by Oakley:

"We stir up this fresh business every day by having a well-paid excited sales force throwing exciting propositions to a lot of people."

They do it by "spearing people in garages, getting in and out of their cars on parking lots, getting in and out of their cars on the streets or any place where there are cars and people getting in and out of them." Oakley adds, "Hull-Dobbs salesmen have been called down by the police for stopping people at the stop lights and throwing them interesting propositions on their cars."

That, in a few sentences, is the Hull-Dobbs philosophy of selling. Forget the prospect lists. Go out and get customers, bring them in, sign them up.

• **Sales Talk**—The Hull-Dobbs people figure that most car dealers lose the psychological moment when they sit back and wait for the customer to ask how much he's going to get for his old car. Not people who learned under the H-D-O system. The whole pivot on which their sales pitch turns is price—and they make the prospect bring it up. The method is described succinctly by Jim Miles, Hull-Dobbs salesman who left the recent customer not knowing what hit him. It all started in a friendly way:

"While talking casually to Joe and George, I cold-turkeyed George about trading his Plymouth. He indicated he might be interested. I immediately qualified him by finding out if he was ready (today), willing, and able (had enough down payment or cash). I qualified him affirmatively while walking to his car. I made several propositions of an 'if-I-could-would-you' nature. I got him to make an offer.

"Finally I said, 'If I could trade for \$1,000 and your '53 Plymouth, would you trade on a new Ranch Wagon?' He said he wouldn't spend more than \$800. We were only \$200 apart. I figured we could probably make a deal because I knew he was ready, willing, and able."

The rest was easy. They finally compromised and Miles wrote up the order and got George to sign, even before the boss had looked over and approved the deal. That's a cardinal rule with Hull-Dobbs—sign 'em up immediately. Then Miles got George's keys, another Hull-Dobbs rule of procedure. There are two good reasons for this: You can get his car over to the Hull-Dobbs appraisers of used cars and you can hand the customer a set of keys to a new Ford so that he can take a trial spin. The company's profit on the trade was \$100—a closer deal than usual.

The theory is that their salesman

## FIRST AGAIN!...

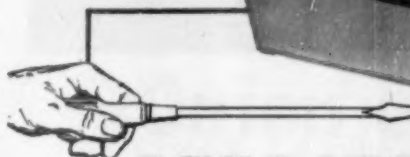
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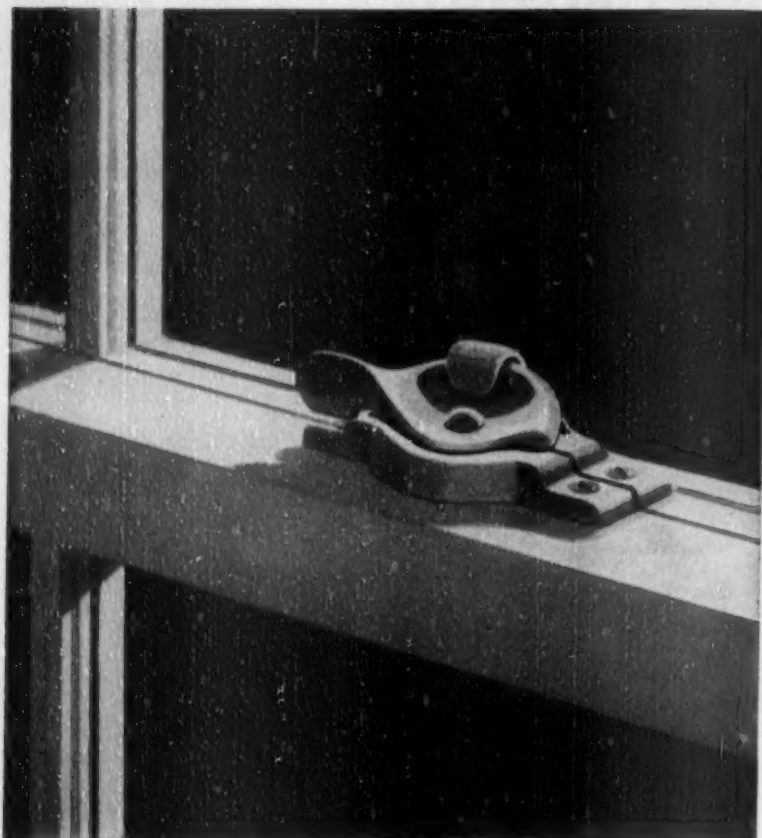
OVER 14,000,000 SATISFIED OWNERS... AMERICA'S BEST BUY!

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**"... 'when they start earning \$10,000 a year we tell them they better get on our side' . . ."**

**HULL-DOBBS starts on p. 46**

approaches the prospect as his own boss. The sales manager isn't supposed to get into the act until later. The salesman lets the customer set his own price, writes it up, then takes it to the boss for an O.K.

This is the official line as laid out by a Hull-Dobbs official:

"When the deal is written up, the salesman says to the customer, 'Now, this is a long deal, we know that. I've got to sell this to my boss. I want you to know that I'm working on a commission basis, so I'm actually on your payroll. I'm going to get this deal through—even if it's a little rough on the house.'"

There's a point, however, at which Hull-Dobbs calls a halt. Jimmy Dobbs says the company encourages young salesmen to push deals that will get the sale. But, says Dobbs, "When they start earning \$10,000 a year we tell them they better get on our side."

• **Crackdown**—The zeal of the H-D-O people to do what one official calls "exposing themselves to business wherever they go" has succeeded in rubbing a lot of people the wrong way besides the Memphis police. Hull-Dobbs is generally credited with having revived the so-called "would-you-takes" during the postwar period. These are notes, printed as leaflets or scribbled on the backs of envelopes, which are stuck under windshield wipers or on the seats of parked cars. These usually read something like this: "Would you take X dollars on a trade for a new Ford? (Signed)."

A lot of dealers have been using this method of getting new customers into showrooms, and there have been abuses. Sometimes the would-you-takes have been mere come-ons; the dealer says that he was willing to give the deal on a car that has been sold, or some such evasion. In any case, Better Business Bureaus have been squawking for some time about the abuses of the practice, and Hull-Dobbs—which denies any wrongdoing, though it admits that occasionally an overenthusiastic salesman can cause trouble—officially quit using would-you-takes on Apr. 1.

Now Hull-Dobbs salesmen are using a new technique. They still shove little notes under windshields, but now they read something like this: "I need this car for a prospect of mine. Please call or see me at once. (Signed.)"

This doesn't end the competition's complaints against Hull-Dobbs. The

Memphis wheeler-dealers are accused of having been chief promoters of the "blitz" method of selling, those day-and night-long jamborees that are widely publicized and are calculated to unload a flock of cars at one big push.

• **Finding the Customer**—What the blitz and would-you-take methods illustrate is Hull-Dobbs' willingness to find customers wherever they happen to be. Dobbs himself, for example, was getting his own Ford Victoria out of a garage in downtown Memphis the other day when he turned to a man getting his car out and ended by giving the latter the keys to the Victoria for the night. The philosophy is simple: Everybody is a potential client.

This all adds up to another characteristic of Hull-Dobbs. It's strictly a volume operation.

The way Hull-Dobbs works is roughly this: Each day the partners set a quota on the amount of profit they want to realize. Say they set \$1,000 on a particular day and that by 5 p.m. only \$800 had been made. It wouldn't be unusual for Oscar Oakley to pop into the showroom and tell the boys to get on the ball and make that \$200 remaining, even if it meant selling 20 cars at \$10 profit for every car. Furthermore, the place would stay open until midnight if it took that long to get it.

Pep meetings are only part of the incentives that Hull-Dobbs uses to get its salesmen to sell. Sometimes the partners will paste up a batch of \$10 bills on an office wall and tell every man who sells a car that day to go and take one down as a bonus. They believe in paying a salesman well. Dobbs says:

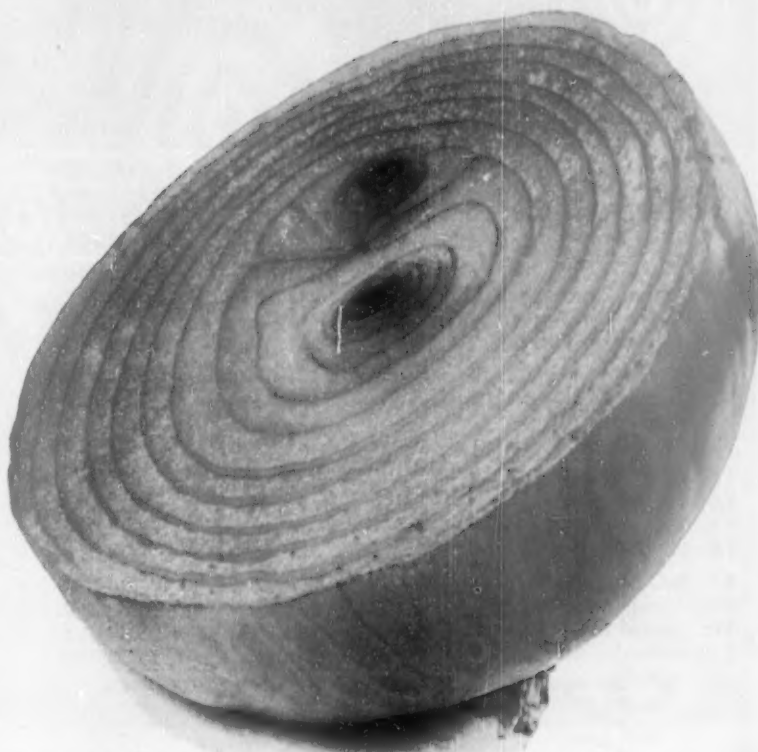
"We want to free him, relax him, teach him how to have fun and show him how to make big money." And he adds, "We want our boys to be happy, to buy the best clothes. We want them to be the best tippers and to capitalize on that wherever they go. You can't do that with a fellow making \$200, \$300, or \$400 a month."

Hull-Dobbs salesmen earn anywhere from \$400 a month on up, and \$1,500-a-month men are not uncommon. And the possibilities of advancement are always just around the corner. The partners will stake him to an agency if he wants to have one of his own.

If he needs \$50,000 to get started, it's only a matter of writing out a check. Hull-Dobbs is paid back out of profits. This is called a "buy out" and Hull-Dobbs deliberately keeps about a dozen agencies in one or another stage of buy out.

The whole deal looks so good that recently Robert Breech (son of Ernest L. Breech, executive vice-president and No. 2 man at the Ford Motor Co.) sold his own Lincoln-Mercury agency in Massachusetts to go with Hull-Dobbs. He manages the Los Angeles branch.

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## The 20 Biggest Retailers: The 1953 Score

	Sales in Fiscal Year (000 omitted)		% Change	Long-Term Increase Since 1939
	1953	1952		
1. Great Atlantic & Pacific Tea	\$3,755,687	\$4,000,000#	6.5%	303.9%
2. Sears, Roebuck	2,932,338	2,981,925	1.7	383.0
3. Safeway Stores	1,639,095	1,751,820	6.9	354.0
4. J. C. Penney	1,079,257	1,109,508	2.8	293.3
5. Kroger	1,051,850	1,058,609	0.6	335.0
6. Montgomery Ward	1,084,586	999,123	-7.9	110.4
7. F. W. Woolworth	712,655	713,870	0.2	123.9
8. American Stores	531,945	593,742	11.6	417.1
9. Allied Stores	501,841	515,830	2.8	360.1
10. Federated Dept. Stores	447,862	478,849	6.9	334.9
11. National Tea	405,221	462,282	14.1	713.5
12. May Dept. Stores	447,548	454,149	1.5	337.1
13. First National Stores	424,522	442,180 #	4.2	237.4
14. Food Fair Stores	292,660	350,000E	19.6	1,328.6
15. S. S. Kresge	326,418	337,299	3.3	119.2
16. R. H. Macy*	332,146	334,030	0.6	156.1
17. W. T. Grant	283,240	299,768	5.8	188.9
18. Gimbel Bros.	291,679	286,419	-1.8	210.5
19. Jewel Tea	226,292	242,695	7.2	879.3
20. Colonial Stores	214,955	233,890	8.8	483.6

E—Store's own estimate

\*—12 mos. ended Jan. 30 '54

#—BUSINESS WEEK estimate

©BUSINESS WEEK

## Food Chains Rang Up the Most Gains

The year 1953 was the year when a retailer finally rang up \$4-billion in sales. Great Atlantic & Pacific Tea Co. has been pushing that goal for some time; now, according to early estimates, it made it. This was also the year when one of the old-timers in the billion-dollar club—Montgomery Ward & Co.—slipped from that category, and fell from the No. 4 spot to No. 6 among the top 20.

For the most part, the 1953 score board registers few changes; mostly it underscored some existing names. There was one new name on the list—Colonial Stores, a food chain. In nosing out City Stores Co., a department store chain, Colonial gave the tipoff to the most significant developments of the year.

• **The Leader**—If sales growth is your criterion, the food business is the place to be nowadays. Most of the big gains came from the food chains last year.

Food Fair Stores once again reported the largest percentage increase—close to 20%. And all the gains of more than 10% came from the food group.

Consequently, most of the upward shifts in rank were within that group. Four of the food stores that were on the list in 1952 moved up a peg or so during 1953. Food Fair and National Tea Co. moved up two notches—the

only retailers on the list to claim this particular glory. Kroger Co. and Jewel Tea Co. climbed one rung.

Mostly, the food stores climbed at the expense of the department stores. It's true that most department stores on the list registered gains last year—Gimbel Bros. was the single exception. Even though it fell off the list, City Stores itself set new sales records. But for the most part, the department stores crawled forward slowly. None was able to boost its place on the ladder. Three were shoved down some: May Dept. Stores Co., Gimbels, and R. H. Macy & Co.

Federated Department Stores was the exception. Its gain of close to 7% was better than that of some food stores, and considerably better than the rest of the department store group.

• **Prices Steady**—On one point, the year was pretty satisfactory. The retailers plowed ahead without benefit of price increases. The cost-of-living food index for 1953 was 112.8, down from 114.6 the year before. Similarly, clothing dropped off from 105.8 to 104.8; house furnishings from 108.5 to 107.9. Apparently, the 1953 sales rise represented unit increases as well as dollar.

Expansion was the keynote in many cases. Food Fair continued to expand

at a fast clip; it added some 30 supermarkets during the year. Federated benefited from its new Fedway store volume. Also, Abraham & Straus' new branch (a Federated store) in Hempstead, N. Y., topped all expectations. It claims to be the biggest branch store in the country—with the possible exception of J. L. Hudson's huge new branch outside Detroit (BW—Apr. 10 '54, p. 129). W. T. Grant Co., whose 5.8% increase made it the fastest grower among the variety stores on the list, credits much of it to the addition of some 30 stores—and some to aggressive promotion and merchandising.

While the full count on profits isn't in yet, the picture appears to be spotty. Most of the big 20 had net profit increases last year. But the variety stores were an exception; only Grant was able to show a gain—from \$7.5-million to \$8-million. Safeway had an outstanding record: It doubled its net income after taxes, from \$7-million to \$14-million.

• **More Customers**—Population increases helped all around, of course. And the food stores continued to take advantage of the changing habits of that population: the growth of the suburbs, the trend to one-stop shopping, the constant addition of such new lines as records (BW—May 8 '54, p. 46).

(Advertisement)

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# AUTOMATIC DRIVE TRUCKS

**T**HIS announcement marks the achievement of a goal towards which General Motors has been working for a quarter-century.

That is the elimination of manual gearshifting in GM-built motor vehicles—*trucks as well as cars*—a task first undertaken by our research engineers in 1929.

It was no easy assignment. It took more than ten years of hard work, the testing and discarding of hundreds of different mechanisms, before the problem was superbly solved in passenger cars by our Hydra-Matic, Dynaflow and Powerglide automatic transmissions.

**I**n trucks the need for a self-shifting drive is infinitely greater—and so is the engineering problem because of the far heavier loads carried and the larger number of forward-speed gears required to move them.

It was not simply a matter of adapting a passenger car drive. A completely different automatic unit had to be designed and that took still more time.

**B**ut by 1950, our GMC Truck & Coach Division had developed and thoroughly road-tested a Dual Range Hydra-Matic-type drive for medium-weight trucks. Then came Korea and our entire production of Truck Hydra-Matic Transmissions was required for army vehicles where its superiority was proved in front-line service.

Within the past eighteen months both four-speed and eight-speed versions of this battle-proved transmission have been successfully introduced to the public in light-duty and middleweight GMC trucks. But there still remained the problem of

heavy-duty trucks, some of which require as many as 15 forward speeds.

**N**ow our engineers—drawing upon this backlog of twenty-five years' experience—have developed a Twin Hydra-Matic Multiple-Speed self-shifting drive for trucks rated above forty-five thousand pounds gross combination weight.

Thus has GM marshalled its inventive skills to bring the many advantages of Hydra-Matic Hauling to every class of truck operator. These benefits include:

Lower fuel cost—because Truck Hydra-Matic automatically keeps the engine in proper gear for every operating condition, eliminating wasteful engine "gunning."

Less maintenance expense—because Truck Hydra-Matic prevents "shock-loading" strains on engine, drive line and rear axle—plus the fact that there is no clutch to repair or replace.

Greater safety—because Truck Hydra-Matic does the shifting, easing the driver's work and permitting him to concentrate on the road ahead.

**I** think these are good reasons why every user of trucks should investigate the GMC line of Hydra-Matic Trucks—whether you use a small pickup or a fleet of heavy highway haulers.

You are cordially invited to call upon your local GMC dealer to learn more about them.

  
President

GENERAL MOTORS CORPORATION

# Restaurants Make a Comeback

Despite tightening of expense accounts they are doing better . . . Canned soda spreads . . . General Mills drops appliances . . . Study of home air conditioning.

The restaurant business is making a comeback after its postwar slump. That's the word from the National Restaurant Assn. meeting in Chicago last week.

Restaurant owners find some soft spots in their trade. Strikes and layoffs have hurt some areas. Luxury spots that cater to the free spender and the big expense account trade suffered sharp drops last year. But association officials estimate that so far this year, restaurants are serving an average of 75-million meals a day—about 5% above last year's. Total dollar sales will run about \$16-billion, the experts predict.

• **Suburbia**—A growing population has helped. But the restaurants are capitalizing on some of the trends of the day. Like other forms of retailing (page 58), they are following the population to the suburbs. More working wives are taking a holiday from their stoves after a day at the plant. And, as the household cook becomes a figure of the past, housewives have another incentive to take a night off—at the neighborhood restaurant.

Sharper competition and rising labor costs are keeping restaurant operators on their toes. They are turning to greater mechanization to hold down labor costs. Better food, more attractively served, is a step to balk the competition. Owners are sinking more money into equipment. Average capital investment usually runs around \$500 a seat; many new restaurants are putting as high as \$750 to \$1,500 a seat into their facilities.

Two postwar phenomena are spurring: take-out meals (BW—May 3 '54, p44), and in-plant food service by companies that specialize in the work. The 500 companies that now serve meals in plant and institutional cafeterias and restaurants figure their 1954 sales will reach \$600-million this year, and that they will serve over 1.5-million meals to workers.

## Tying a Can on Bottles

The move to put soft drinks in cans instead of bottles (BW—Jan. 30 '54, p47) has grown up from a brash experiment to a serious business. More and more soda pop processors are changing their packaging operations over. Newcomers to the field are enlisting daily.

This week, two big companies moved beyond the experimental stage:

• **Pabst Brewing Co.**'s Hoffman soft drink division announced that local market tests of a new carbonated beverage in cans, "Tap-a Cola," have been so successful that it will start national distribution and advertising next month.

• **American Can Co.**, which had held back on the idea because the high pressure of carbonated beverages proved too much for some experimental flat-top cans, has developed a new flat-top can with an interlocking seam, which it will supply to Pabst.

Bottlers are worried. Their more expensive franchise distribution system is facing a real challenge from nationally distributed throw-away cans. Big question is whether Coca-Cola and Pepsi-Cola will join the trend to cans.

## Guinea Pigs in Luxury

On June 1, home air conditioning will start a year-long physical examination. Families living in 22 brand-new houses in a test village in Austin, Tex., have signed up to be the guinea pigs. At the end of the year, the sponsors hope to have answers to questions like these:

• Can you operate year-round air conditioning in a 1,200-sq. ft. house at a total cost of \$80 per year?

• Can you build such a house at prices middle-income people can pay?

• How does air conditioning benefit the people who live in it?

• **NAHB Project**—The idea for the test village started a couple of years ago when Ned A. Cole, young Austin architect, went to National Assn. of Home Builders with some questions about air conditioning. NAHB made Cole chairman of a committee to find out the answers. The sponsors of the project—NAHB, Air Conditioning & Refrigerating Institute, National Warm Air & Air Conditioning Assn., and the University of Texas—are putting up some \$33,000 for research, plus equipment and manpower.

Including land, each house costs around \$14,000 or \$15,000. Each has a different brand of air conditioning equipment.

• **Other Checks**—Technical engineers will watch operating costs. For example, Electric Bond & Share Co. will keep tabs on the electric load required. Engineers will inspect the houses regularly.

The health department of the University of Texas will keep track of the pollen count—for hay fever sufferers—and the incidence of colds and other ailments. The university's psychology department will try to learn whether air conditioning changes people's living habits.

## End of Lesson

General Mills' sale to Illinois McGraw Electric Co. of its home appliance line has prompted a lot of talk. The McGraw Electric subsidiary got the capital equipment, tooling, and inventories for General Mills' Betty Crocker iron, steam ironing attachment, automatic toaster, food mixer, grill-waffle baker, automatic coffee maker, and fryer-cooker. McGraw did not get the Betty Crocker trademark. When it has sold the inventories it bought, it will have to drop Betty's name from its list.

Considering the fanfare with which General Mills got into home appliances (BW—May 15 '54, p128), its sudden removal from the scene raises questions.

• **New Switch**—One factor speeded up General Mills' decision to sell out: its growing interest in electronics equipment and precision instruments. Said C. H. Bell, president: "Only about 10% of the division's operations has been in home appliances." How much business the mechanical division did last year is a secret. The chemical, special commodities, and mechanical divisions together accounted for 11% of the company's \$483-million sales.

• **Up and Down Again**—Aside from its dominant interest in electronic equipment, General Mills had some other reasons, which add up to a good case history of the hazards of crashing the appliance business.

Just after the war, the company wanted to break away from a basis strictly on flour, feed, and grocery products. During the war, it had gone boldly into electronic and mechanical manufacture for the armed services. The war-starved home appliance field looked like a natural.

The first product, the Tru-Heat iron "sponsored by Betty Crocker," was a bell ringer (BW—Aug. 10 '46, p76). The company followed this up with a pressure saucepan. But the saucepan hit some hard luck. It took time to line up a plant and the equipment to make it. During that time, the bloom went off the market. Then a fire wiped out the plant, set back production again.

Besides, with a short product line, it became hard to hold distributors. The Korean war curtailed appliance production, slowed up expansion plans. By the time General Mills got its other products off the ground, the market had lost its edge.

## MARKETING BRIEFS

**No-sponsor ban** on Army-McCarthy radio and TV coverage (BW-May 1 '54, p52) was eased last week by Senate investigating committee. From now on, networks may carry "public service" commercials before, after, or during official recesses of the hearing sessions, when and if they resume.

**Trade practice rules**, loosely covering what can and can't be said about products in ads, apply to all members of an industry—whether or not a particular firm sat in with the Federal Trade Commission on drawing them up. This warning was sounded by FTC Commissioner Carretta in a recent speech before a Detroit advertising group.

**Ad agency merger trend** (BW-Dec. 6 '52, p43) is still rolling. Last week, McCann-Erickson, Inc., of New York—fourth largest agency in the U.S.—revealed it will absorb Wilkinson, Schiwetz & Tips, Inc., of Houston, which calls itself Texas' largest local agency.

**Hedging the bet** on shopping centers: In Omaha, Brandeis department store (part of the R. H. Macy chain), which has been fighting suburban shop centers with improvements in its downtown store, just announced it has taken a 99-year lease on a plot of ground on the outskirts of town.

**More 17-in. screens** for TV are on the way: Raytheon's new line (BW-May 15 '54, p114) features a table model, a la Crosley Super V (BW-May 1 '54, p54) to retail for \$139.95. Capehart is bringing out a 17-in. screen model, table size, for \$159.95.

**And tubes:** DuMont will have large-screen color TV tubes ready for use in TV receivers by fall. The Chroma-Sync tube will produce a picture more than twice the size of pictures currently on the market, DuMont says. . . . Chromatic Television Laboratories has started pilot production of an "improved version" of the Lawrence Color TV tube. . . . Meanwhile, Emerson reports that it has found few takers on its color TV leasing plan.

**Toni**, the division of Gillette that made a killing in home permanents, is diversifying—with a new lipstick called Viv. The company is spending \$5-million on an advertising campaign to put its new product over.



## UNIQUE CONSTRUCTION USED AT ATOMIC TEST GROUNDS

Holmes & Narver, Inc., Engineers and Constructors for the Atomic Energy Commission's Pacific Proving Grounds at Eniwetok, announces to industry unique techniques employed in developing a coral concrete of comparable strength to that used for construction in the United States.

Atolls, which are composed entirely of coral, are without fresh water and rock aggregates normally used in concrete mixing. Distilling sea water and transporting rocks over thousands of miles of ocean were too costly, even for a project of this importance.

Conventional construction practices dictated that structurally

strong concrete could only be made from fresh water and the usual rock aggregates.

Accustomed by twenty years of industrial engineering and construction to think in terms of maximum economy, Holmes & Narver technicians instituted controlled research which ultimately produced concrete of strength equivalent to any comparable building requirements in industry. This was accomplished by substituting coral for rock and sea water for fresh water.

This achievement has been commended as a dramatic example of engineering originality and efficient construction control as applied to a specific local problem.

Full scope of the activities of this engineer-constructor organization is summarized in the Holmes & Narver Qualification Record, available to qualified executives.



**HOLMES & NARVER, INC.**  
ENGINEERS-CONSTRUCTORS

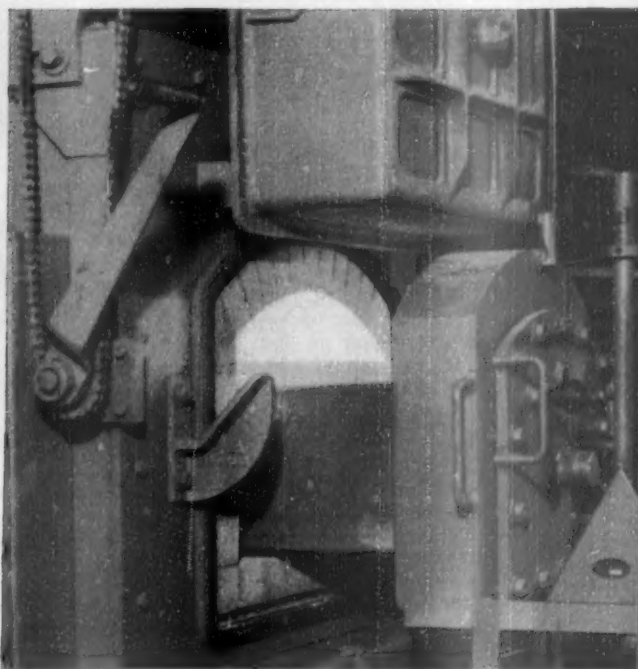
826 S. Figueroa St., Los Angeles 17, California • Washington, D.C. • Sacramento, California

# 65° below to 2,500° above today in

*New Trane laboratory creates "terrible weather" . . .  
helping you to conquer your*



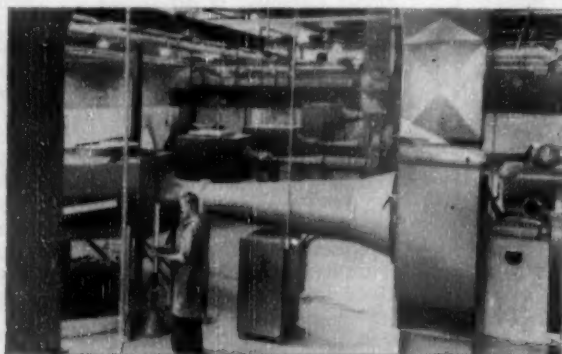
**Cold as Siberia—or the stratosphere!** This room, capable of creating 65-degrees-below-zero cold, is designed for testing the performance of TRANE equipment at low temperatures. Here, a radar tube cooler test set-up is being checked under conditions it might face in some bitterly cold Arctic plane-spotting station.



**2,500 degrees above in this atmosphere-controlled furnace!** Within this furnace may be developed new types of heat exchangers that will work efficiently under the ever-climbing temperatures of new industrial processes . . . processes that will, in turn, create new and improved products for your use in the future.



**Chamber of silence, where a whisper is a "shout."** In this sound-proofed room, technicians test quiet operation of TRANE air conditioning equipment. They read sound levels of the equipment on super-sensitive gauges.



**Thousands of man-made "windstorms"** help design your made-to-order climates of tomorrow. Here, in more than a dozen wind-tunnels, gentle breezes to furious gales are produced to give newly developed TRANE air condi-

tioning, heating and ventilating products their first trial runs — and to test and retest existing models as TRANE engineers seek ways to make them do more work at lower cost—for your comfort and happiness.



**Room-within-a-room is for testing heating equipment.** Refrigerated air is circulated within the double wall, simulating winter conditions. Equipment must maintain specified temperatures throughout inner room.

# La Crosse, Wis., and 60 m.p.h. gale!

*and machines to overcome it . . .  
climate, anywhere in the world!*



*New Trane Research and Testing Laboratory*

**W**ITHERING heat of a mile deep African gold mine . . . the numbing cold of an Arctic military post . . . or super-temperatures encountered in new industrial processes—you may find them duplicated, any day, in the new "House of Weather Magic" at La Crosse, Wis.

It's the new Research and Testing Laboratory of The TRANE Company, dedicated to devising new and better equipment to help you conquer your climate, no matter where you live—and to make heat and cold perform new miracles in industry to bring you still better products at lower cost.

For defense or peace, it is designed to speed the solution of hundreds of problems of air conditioning or heat exchange. Maybe it's a problem of helping to cool the pilot of a jet plane who would otherwise roast because of heat generated by air friction at high speeds. Or a problem of processing chemicals or foods, cooling radar tubes or office workers. For TRANE serves almost everywhere that you find air.

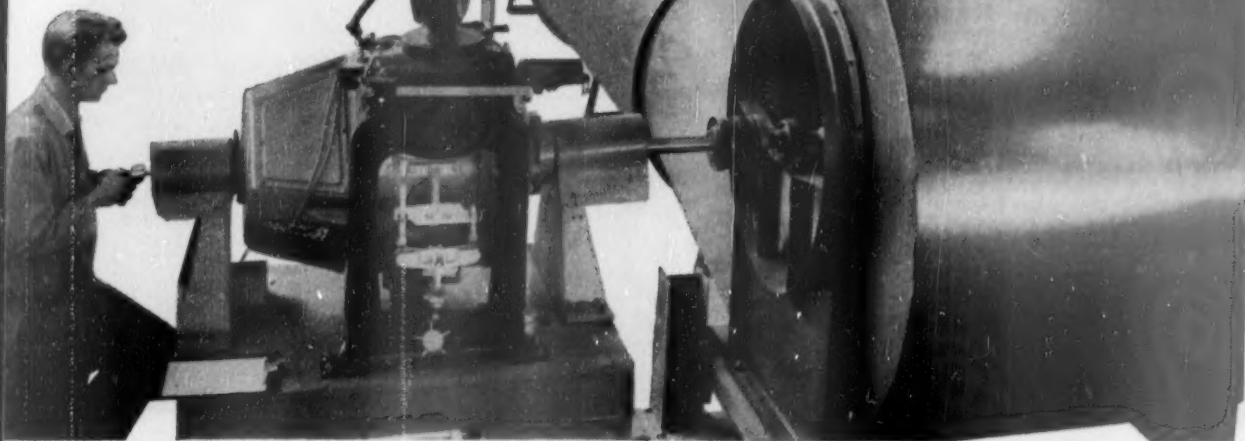
If you have problems in air conditioning, heating, ventilating or heat transfer ask your architect or engineer about TRANE equipment or see your TRANE Sales Office.

## TRANE

*manufacturing engineers of*  
**AIR CONDITIONING, HEATING,**  
*ventilating and heat transfer equipment*

The Trane Company, La Crosse, Wis. • East. Mfg. Div.,  
Scranton, Penn. • Trane Co. of Canada, Ltd., Toronto  
90 U. S. and 14 Canadian Offices

60-mile-an-hour gale is created in this large duct by the TRANE centrifugal fan (foreground) being tested here. Such fans are used in huge ventilation systems in factories, office buildings.



# MANAGEMENT

## What Happened to Executive

The pay of the top officers of the country's big corporations in 1953 reflected generally good business and healthy profits. Executive pay, after leveling off in 1952 (BW-May 23 '53, p110), turned up again last year. The average increase for a group of the country's top earners was something like \$11,000.

That's what shows up in BUSINESS WEEK's fourth annual executive compensation survey, based on Securities & Exchange Commission figures.

BUSINESS WEEK's list of companies is representative of the salaries paid by leading companies in various industrial categories. There are obvious omissions. For instance, under grocery chains you won't find Great Atlantic & Pacific Tea Co., because figures aren't available. The same goes for Ford Motor Co., under autos. In other instances figures had not yet been filed with SEC.

This year's survey has been enlarged to total 277 executives from 107 companies representing 35 industries. For 247 in that group, pay figures for both 1952 and 1953 are available. These executives averaged about \$137,300 in 1952, went up to \$148,300 last year. Two-thirds of them got boosts; only one-quarter took cuts. If you take the full group of 277, the average pay last year was \$144,400. All figures are before personal taxes.

• **Ups**—Three industries led the increase parade: cigarettes (particularly R. J. Reynolds Tobacco Co.), aircraft manufacturing, and chemicals (with the exception of American Cyanamid Co.). The biggest individual increases went to two men at Colgate-Palmolive Co.: Chairman Edward H. Little's income jumped 178% to \$325,779, and William Sims, executive vice-president, earned \$183,631 as against \$67,235 in 1952.

Only eight executives were in the over-\$400,000 charmed circle, and six of them work for General Motors Corp. Harlow H. Curtice, GM's president, finished a couple of lengths ahead of the field by earning \$637,232.

• **Downs**—The cuts were taken in the areas you might expect. Both men listed for R. H. Macy & Co. dropped around \$20,000, and International Harvester Co.'s top management felt similar bites.

No industries were down throughout, but several were spotty, including auto parts, building materials, office equipment, utilities, department stores, oil, agricultural machinery, and containers.

### AGRICULTURAL MACHINERY

	Salary	Bonus	Pension	1953 Total	1952 Total
<b>ALLIS-CHALMERS MFG. CO.</b>					
W. A. Roberts, pres.	\$ 82,367	---	---	\$ 82,367	\$ 71,666
R. S. Stevenson, ex. v.p.	59,203	---	---	59,200	---
J. L. Singleton, v.p.	49,050	---	---	49,050	43,333
<b>INTERNATIONAL HARVESTER CO.</b>					
John L. McCaffrey, pres.	\$112,500	\$ 46,000	---	\$158,500	\$199,277
Peter V. Moulder, ex. v.p.	73,620	42,900	---	116,520	131,620

### AIRCRAFT MANUFACTURING

<b>BOEING AIRPLANE CO.</b>					
Wm. M. Allen, pres.	\$101,405	---	---	\$101,405	\$ 66,440
Wellwood E. Beall, ex. v.p.	72,950	---	---	72,950	59,805
<b>DOUGLAS AIRCRAFT CO., INC.</b>					
Donald W. Douglas, pres.	\$150,174	---	---	\$150,174	\$124,755
F. W. Connel, v.p.	92,848	---	---	92,848	69,747
Arthur E. Raymond, v.p.	70,685	---	---	70,685	61,129
<b>LOCKHEED AIRCRAFT CORP.</b>					
Robert E. Gross, pres.	\$130,830	---	\$ 16,500	\$147,330	\$135,200
Courtland S. Gross, ex. v.p.	98,085	---	9,331	107,416	98,906
C. A. Berler, v.p. & treas.	92,595	---	23,236	115,831	104,837

### APPAREL

<b>CLUETT, PEABODY &amp; CO., INC.</b>					
Berry T. Lathrop, pres.	\$114,823	\$ 23,000*	---	\$137,823	\$ 90,798
Robert L. Palmer, v.p.	57,493	10,500*	---	67,993	67,742
*Under executive incentive compensation plan, approved in 1953.					
<b>HART, SCHAFNER &amp; MARY*</b>					
Mayer Kestelbaum, pres.	\$100,120	---	---	\$100,120	\$100,120
Jak. D. Gray, v.p.	54,620	---	---	54,620	---
Morris Greenberg, v.p.	50,000	---	---	50,000	50,000
*Year ended Nov. 30, 1953.					

### AUTO PARTS

<b>BUNGE AVIATION CORP.*</b>					
M. P. Ferguson, pres.	\$ 84,233	\$ 29,300	\$ 7,844	\$121,377	\$117,441
Charles Marcus, v.p.	60,400	29,280	---	89,680	91,500
*Year ended Sept. 30, 1953.					
<b>BOG-WARNER CORP.</b>					
R. C. Ingerson, pres.	\$ 84,101	\$ 60,000	---	\$144,101	\$134,101
C. S. Davis, chm.	73,800	---	---	73,800	73,400
Matthew Kech, v.p.	34,333	---	\$ 4,742	39,075	44,143
<b>THOMPSON PRODUCTS, INC.</b>					
F. C. Crawford, pres.	\$165,800	---	---	\$165,800	\$187,672
J. D. Wright, v.p.	151,200	---	---	151,200	111,570
*New chairman; [new president].					

### AUTOMOBILES

<b>GENERAL MOTORS CORP.</b>					
Harlow H. Curtice, pres.	\$167,332	\$440,000*	---	\$607,332	\$521,200
Albert Bradley, ex. v.p.	173,323	400,000*	---	573,323	521,375
Louis C. Good, ex. v.p.	136,400	350,000*	---	486,400	446,100
Donald K. Svets, ex. v.p.	136,200	285,000*	---	421,200	446,000
Fredrick G. Doerr, v.p.	135,150	320,000*	---	455,150	430,325
Harry J. Dingle, v.p.	116,200	285,000*	---	401,200	376,200
*In stock and cash, payable in five installments. 14% v.p. in 1952.					
<b>CHRYSLER CORP.</b>					
M. T. Keller, chm.	\$300,900	---	---	\$300,900	\$300,900
L. L. Colbert, pres.	200,900	\$ 60,000*	---	260,900	262,963
B. E. Hutchins, v.p.	162,267	45,000*	---	207,267	271,000
*Continued compensation plan. New chairman financial committee.					

### BAKING & MILLING

<b>CONTINENTAL BAKING CO.</b>					
R. K. Ditzler, chm.	\$ 90,480*	---	---	\$ 90,480	\$ 60,480
E. N. Laughlin, pres.	76,800	---	---	76,800	46,800
*Sal. Dec. 31, 1953, will receive \$15,044 pension and \$50,000 a year consultant salary for five years.					

# Salaries in 1953?

## BAKING & MILLING

	Salary	Bonus	Pension	1953 Total	1952 Total
<b>GENERAL MILLS, INC.*</b>					
Harry A. Bellis, chm.	\$100,000	\$ 23,400	\$ 4,813	\$128,213	---
Chas. H. Bell, pres.	90,000	23,400	4,423	117,823	---
Walter R. Barry, v.p.	75,000	20,400	5,731	99,121	---
*Year ended Mar 31, 1953. *Under profit sharing.					
<b>NATIONAL BISCUIT CO.</b>					
George H. Coppens, pres.	\$126,100	---	---	\$126,100	\$126,000
Ray E. Tomlinson, chm.	91,100	---	---	91,100	91,000
<b>PILLSBURY MILLS, INC.*</b>					
P. S. Gerot, pres.	\$ 75,000	\$ 30,625	\$ 1,911	\$ 97,536	\$ 95,625
P. W. Pillsbury, chm.	65,000	17,875	1,826	84,701	82,875
*Year ended May 31, 1953.					

## BEVERAGES & CANDY

<b>THE COCA-COLA CO.</b>					
H. B. Nicholson, pres.	\$134,633	---	---	\$134,633	\$110,700*
Felix W. Costa, v.p.	72,666	---	---	72,666	66,666
*Promoted from v.p. to president Aug. 2, 1952.					
<b>HERSHEY CHOCOLATE CORP.</b>					
P. A. Staples, chm. & pres.	\$ 75,000	---	---	\$ 75,000	\$ 75,000
J. J. Gallagher, sales mgr.	39,000	\$ 1,348	---	40,348	39,348

## BUILDING MATERIALS

<b>JOHNS-MANVILLE CORP.</b>					
L. M. Cassidy, chm.	\$126,700	\$ 32,396	\$ 6,367	\$165,463	\$168,420
A. E. Fisher, pres.	101,500	27,548	7,046	136,094	141,887
C. F. Rossweller, v.p.	77,500	22,176	4,702	104,378	112,500
<b>U.S. GYPSUM CO.</b>					
C. H. Shaver, chm.	\$ 96,365	---	---	\$ 96,365	\$ 84,942
Oliver M. Knobe, pres.	90,000	---	---	90,000	90,000
<b>AMERICAN RADIATOR &amp; STANDARD SANITARY CORP.</b>					
Theodore E. Mueller, chm.	\$100,000	---	\$ 25,000	\$125,000	\$150,000
Joseph A. Grazier, pres.	90,795	---	25,000	115,795	95,440
Walter Whitaker, v.p.	57,500	---	16,500	74,000	73,508
<b>CRANE CO.</b>					
J. L. Holloway, pres.	\$127,000	---	---	\$127,000	\$128,700
V. P. Rumely, v.p.	62,600	---	---	62,600	63,700

## CHEMICALS

<b>ALLIED CHEMICAL &amp; DYE CORP.</b>					
F. J. Emerich, pres.	\$125,000	---	---	\$125,000	\$125,000
E. W. Clark, v.p.	81,250	---	---	81,250	75,000
<b>E. I. DU PONT DE NEMOURS &amp; CO.</b>					
Crawford H. Greenwall, pres.	\$161,293	\$340,000	---	\$501,293	\$503,290
Angus B. Scholz, v.p.	117,672	230,000	---	347,672	234,184
<b>DOW CHEMICAL CO.*</b>					
Leland J. Dean, pres.	\$137,578	---	---	\$137,578	\$129,403
Earl W. Bennett, chm.	99,056	---	---	99,056	93,265
Mark E. Pulnom, ex. v.p.	107,310	---	---	107,310	101,025
*Year ended June 30, 1953.					
<b>UNION CARBIDE &amp; CARBON CORP.</b>					
Marce G. Dial, pres.	\$225,000	---	---	\$225,000	\$162,500
George O. Curme, Jr., v.p.	120,200	---	---	120,200	140,867
<b>MONSANTO CHEMICAL CO.</b>					
Charles Allen Thomas, pres.	\$155,000	---	\$ 11,324	\$166,324	\$139,827
Robert R. Cole, v.p.	105,000	---	10,894	115,894	97,726
<b>AMERICAN CYANAMID CO.</b>					
K. C. Towne, pres.	\$ 87,500	\$239,400	---	\$326,900	\$333,431
W. O. Malcolm, v.p.	59,167	99,650	---	158,817	161,924
S. C. Moody, v.p.	59,167	99,650	---	158,817	161,924

## CIGARETTES

<b>AMERICAN TOBACCO CO.</b>					
Paul M. Hahn, pres.	\$120,000	\$131,852	---	\$251,852	\$237,537
Edmund A. Harvey, v.p.	50,000	105,481	---	155,481	---
<b>LIGGETT &amp; MYERS TOBACCO CO.</b>					
S. F. Few, pres.	\$220,287	---	---	\$220,287	\$192,666
W. A. Blount, v.p.	143,172	---	---	143,172	125,766

(Continued on page 64)

FIRST WHEN SECONDS COUNT

How  
**NOT**  
to  
make it  
**HOT**  
for  
yourself!

Best way to keep small fires small is to immediately and automatically notify the Municipal Fire Department. And you can do that with Gamewell Automatic Alarm devices that send the alarm as soon as a sprinkler head goes off.

That keeps fire damage small. It reduces water damage. It frequently permits re-rating of insurance to reduce premiums.

To get the facts about Safety Engineering your plant against big fire damage, ask a Gamewell engineer to work with your plant officials. Write today.

## THE GAMEWELL COMPANY

CHESTNUT STREET  
NEWTON UPPER FALLS 64, MASS.

**GAMEWELL**

FIRE ALARM SYSTEMS

SAFETY ENGINEERED FOR YOUR PROTECTION

It's true  
what  
you've  
heard



about  
**MASSACHUSETTS**

it's the

**best  
spot**

for your  
**Plant**

It's true — there's a new spirit in Massachusetts. There are new reasons this pioneering industrial state may be just the spot for your plant.

The world's finest research facilities . . . skilled workers with a tradition of craftsmanship . . . a record of excellent management-labor relations . . . nearness to mass markets — these are some of the facts you should consider in planning a new site. Write for fact-filled booklet "3 New Aids to Business in Massachusetts."

You'll be  
Welcomed  
in . . .  
**MASSACHUSETTS**



**MASSACHUSETTS  
DEPARTMENT OF COMMERCE  
334 BOYLSTON ST., BOSTON  
COPLEY 7-5600**

. . . R. J. Reynolds' top men got big hikes, but Macy, Container Corp., Bristol-Myers dropped . . .

#### CIGARETTES

	Salary	Bonus	Pension	1953 Total	1952 Total
<b>R. J. REYNOLDS TOBACCO CO.</b>					
John C. Whitaker, chm.	\$138,858	---	\$ 15,866	\$174,724	\$143,389
E. A. Cant, pres.	98,662	---	11,436	106,130	73,998

#### COMMUNICATIONS

<b>AMERICAN TELEPHONE &amp; TELEGRAPH CO.</b>					
Chas. F. Craig, pres.	\$190,326	---	---	\$190,326	\$173,405
Neil S. Dunlop, ex. v.p.	139,365	---	---	139,365	129,390
<b>WESTERN UNION TELEGRAPH CO.</b>					
W. P. Marshall, pres.	\$ 92,124	---	---	\$ 92,124	\$ 92,800
T. F. McNamee, v.p.	35,504	---	---	35,504	33,668

#### CONTAINERS

<b>AMERICAN CAN CO.</b>					
Wm. C. Stalk, pres.	\$158,300	---	---	\$158,300	\$128,467
Irwell C. Taylor, v.p.	93,000	---	---	93,000	87,600
<b>CONTINENTAL CAN CO., INC.</b>					
James D. Clay, chm.	\$108,000	---	---	\$108,000	\$108,000
Wm. A. Eggers, pres.	96,000	---	---	96,000	96,000
Thomas C. Fogarty, v.p.	81,250	\$ 13,892	---	95,142	72,930
<b>CONTAINER CORP. OF AMERICA</b>					
Walter F. Pasopke, chm.	\$100,000	\$ 73,000*	---	\$173,000	\$184,492
Wesley M. Dixon, pres.	80,000	38,000†	\$ 5,265	123,265	128,365

\*\$10,000 out of profits for "Container Common Stock Trust," part of non-contributory stock bonus plan for benefit of all salaried employees.  
†\$8,000 from same source as above.

#### DAIRY PRODUCTS

<b>BORDEN CO.</b>					
Theodore G. Montague, pres.	\$132,115	---	---	\$132,115	\$122,600
Harold W. Cantori, v.p.	97,900	---	---	97,900	97,400
<b>NATIONAL DAIRY PRODUCTS CORP.</b>					
L. A. Van Bessel, chm.	\$139,260	---	---	\$139,260	\$151,220
L. E. Stewart, pres.	158,347	---	---	158,347	144,633

#### DEPARTMENT STORES

<b>MILLER STORES CORP.</b>					
Chas. E. McCarthy, pres.	\$ 50,240	\$ 75,070	---	\$125,310	\$104,293
Edward B. Milton, v.p.	49,160	47,714	\$ 3,370	100,244	97,160
A. E. O'Connell, chm.	70,240	55,000*	5,610	131,850	---
*Plus \$16,000 from pension under previous employment contract.					
<b>FEDERATED DEPARTMENT STORES, INC.</b>					
Paul Lazarus, Jr., pres.	\$154,843	---	---	\$154,843	---
John L. Loefer, ex. v.p.	90,220	---	---	90,220	---
Walter H. Pfeiffer, Jr., pres.	112,344	---	---	112,344	---
<b>M. H. MACY &amp; CO., INC.*</b>					
Jack I. Struss, pres.	\$135,430	---	---	\$135,430	\$153,881
Edwin P. Chisland, v.p.	110,430	---	---	110,430	125,845

\*Year ended Aug. 1, 1953.

#### DISTILLERIES

<b>DISTILLERS CORP. — SEAGRAMS, LTD.*</b>					
Samuel Bronfman, pres.	\$356,042	---	---	\$356,042	\$365,016
Allen Bronfman, v.p.	203,021	---	---	203,021	207,103
*Year ended July 31, 1953.					
<b>NATIONAL DISTILLERS PRODUCTS CORP.</b>					
John E. Bierlich, pres.	\$185,723	---	---	\$185,723	\$185,642
Ernest Steinbo, v.p.	80,581	---	---	80,581	78,332

#### DRUGS

<b>ABBOTT LABORATORIES</b>					
Ernest H. Volz, pres.	\$ 80,000	\$ 3,904	\$ 1,099	\$ 84,903	\$ 84,849
James F. Stiles, Jr., chm.	65,500	3,360	1,059	69,919	69,814
Ferdinand H. Young, v.p.	64,000	3,308	1,059	68,367	69,252
<b>BRISTOL-MYERS CO.</b>					
Leo H. Bristol, pres.	\$ 84,937	---	\$ 1,610	\$ 86,547	\$ 90,449
Henry P. Bristol, chm.	78,000	---	2,086	80,086	98,101
Wm. M. Bristol, ex. v.p.	75,646	---	1,368	77,014	76,534
<b>STURDIVANT DRUG, INC.</b>					
James Hill, Jr., chm. & pres.	\$131,404	---	---	\$131,404	\$131,404
J. Mack Niebert, ex. v.p.	68,000	---	---	68,000	60,000
E. I. McInnes, v.p.	70,850	---	---	70,850	---

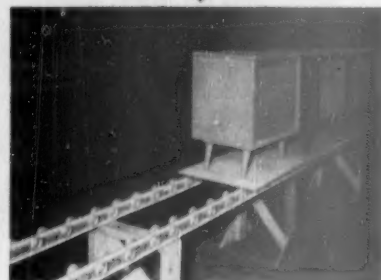
... Safeway Stores' Lingen Warren took no salary, but earned \$319,223 in bonus and pension ...

DRUGS					
	Salary	Bonus	Pension	1953 Total	1952 Total
<b>REXALL DRUG, INC.</b>					
J. W. Dent, pres.	\$ 75,000	---	---	\$ 75,000	\$ 62,500
C. E. Cooper, v.p.	51,000	---	---	51,000	---
F. T. Lane, v.p.	50,000	---	---	50,000	45,000
<b>ELECTRICAL EQUIPMENT</b>					
<b>GENERAL ELECTRIC CO.</b>					
Ralph J. Cordner, pres.	\$214,991	---	---	\$214,991	\$202,524
Philip D. Reed, chm.	147,519	---	---	147,519	140,028
Kenny Y. Erben, ex. v.p.	125,017	---	---	125,017	---
<b>WESTINGHOUSE ELECTRIC CORP.</b>					
Gwilym A. Price, pres.	\$203,250	---	---	\$203,250	\$203,250
L. E. Osborne, ex. v.p.	125,000	---	---	125,000	125,000
<b>FOOD PRODUCTS</b>					
<b>STANDARD BRANDS, INC.</b>					
Joel S. Mitchell, pres.	\$108,333	---	---	\$108,333	\$100,000
Joseph A. Lee, 1st v.p.	68,750	---	---	68,750	75,000
<b>GENERAL FOODS CORP.</b>					
Clorence Francis, chm.	\$130,000	\$ 44,999*	\$ 24,442	\$199,441	\$153,491
Austin S. Igleheart, pres.	115,000	39,999*	20,444	175,443	134,676
Charles G. Mortimer, ex. v.p.	105,000	24,999*	10,706	140,705	101,759
*Cash and stock.					
<b>LIBBY, McNEILL &amp; LIBBY</b>					
Charles S. Bridges, pres.	\$ 41,462	---	---	\$ 41,462	\$ 36,145
*As of Aug. 4, 1953.					
<b>CORN PRODUCTS REFINING CO.</b>					
E. W. Reid, pres.	\$ 80,000	---	---	\$ 80,000	\$ 80,000
J. R. Rhoads, fin. v.p.	60,506	---	\$ 7,861	68,367	68,375
W. T. Brody, v.p.	60,000	---	14,364	74,364	74,364
<b>GROCERY CHAINS</b>					
<b>KROGER CO.</b>					
Joseph B. Hall, pres.	\$150,000	---	---	\$150,000	\$150,000
Jacob E. Davis, v.p.	50,000	\$ 18,163	---	68,163	50,000
Wm. E. Carler, v.p.	50,000	16,163	---	66,163	---
<b>SAFEWAY STORES, INC.</b>					
Lingen A. Warren, pres.	---	\$272,714	\$ 46,509*	\$319,223	\$143,060
Dwight Edwards, v.p.	60,000	36,358	19,899*	116,257	62,438
*Profit sharing plan.					
<b>GLASS</b>					
<b>PITTSBURGH PLATE GLASS CO.</b>					
H. S. Higgins, pres.	\$ 80,000	\$ 90,116	---	\$170,116	\$170,116
R. S. Tucker, ex. v.p.	67,500	66,850	---	134,350	134,350
C. M. Brown, chm.	47,500	84,218	---	131,718	131,718
<b>OWENS-ILLINOIS GLASS CO.</b>					
J. P. Lewis, chm.	\$125,000	---	---	\$125,000	\$125,000
C. R. McGowan, pres.	125,000	---	---	125,000	100,000
C. G. Bensinger, v.p.	90,050	---	\$ 6,320	96,370	---
<b>LIBBEY-OWENS-FORD GLASS CO.</b>					
John D. Bingers, chm.	\$130,000	---	---	\$130,000	\$130,000
G. P. MacNish, pres.	94,900	7,300*	---	102,200	66,300
C. W. Davis, v.p.	71,500	5,425*	---	76,925	50,440
*Contribution under company "Stockplan."					
<b>HAZEL-ATLAS GLASS CO.*</b>					
J. H. McNeish	\$ 50,000	---	---	\$ 50,000	\$ 50,000
J. S. Alege, v.p.	30,000	---	---	30,000	30,000
*Year ending Jan. 2, 1954.					
<b>INDUSTRIAL MACHINERY</b>					
<b>BABCOCK &amp; WILCOX CO.</b>					
Alfred Liddle, pres.	\$102,000	---	---	\$102,000	\$ 90,000
Luke R. Sawyer, v.p.	59,000	---	---	59,000	51,041
<b>CATERPILLAR TRACTOR CO.</b>					
L. B. Neumiller, pres.	\$107,500	---	---	\$107,500	\$106,183
H. S. Eberhard, ex. v.p.	77,500	---	\$ 10,271	87,771	79,102
A. T. Brown, ex. v.p.	73,750	---	13,677	87,427	82,453
<b>DRESSER INDUSTRIES, INC.</b>					
H. N. Mollen, pres.	\$106,821	---	---	\$106,821	\$112,156
J. B. O'Connor, ex. v.p.	92,821	---	---	92,821	98,156
<b>INVERSOLO-RAND CO.</b>					
D. C. Keefe, pres.	\$123,600	---	---	\$123,600	\$125,000
D. R. Lowry, 1st v.p.	90,500	---	---	90,500	90,000
Geo. Doubleday, chm.	78,000	---	---	78,000	---

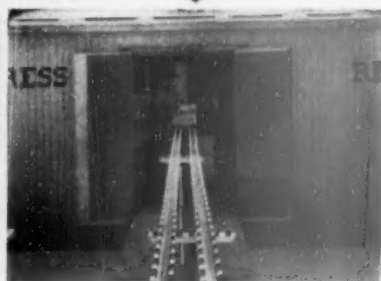
(Continued on page 68)



FOR FIXED  
ASSEMBLY LINES



FOR ULTRA PORTABLE  
CARTON HANDLING



FROM THE SAME basic "out-of-stock" 5 ft. and 10 ft. A-F Live Rail "Singles" — straight and curved — you can quickly set up your own low cost fixed installation similar to this one at The Kelton Co. in Boston ... or — like the owner of this Cincinnati Merchandise Warehouse you can space them on portable A-F Stand Taps to suit weight and width of parts, products or cartons being moved. No other type of conveyor is so versatile; so economical.

Write for new FREE Catalog—today.

Pre-Engineered Products Division

**ALVEY-FERGUSON**

7 Disney Street • CINCINNATI 9, OHIO

WEST COAST — P. O. Box 244  
AZUSA, CALIFORNIA

Now! Eliminate the mess and  
**SLASH WASHROOM EXPENSE**

**90%**

The fastest automatic electric hand dryer ANYWHERE: dries hands or face in seconds; deodorizes washrooms — multiple installation; handles heaviest restroom traffic with ease. With the cost of comparable hand dryers?

**ELIMINATES JANITORIAL COSTS**  
CHECKS SKIN IRRITATIONS  
REFRESHES STALE AIR

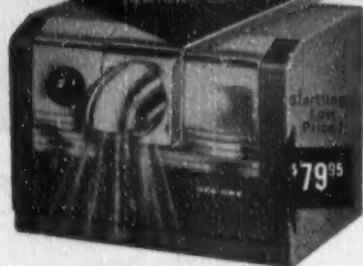
Gray, metallic finish with chrome trim. Chrome swivel nozzle, 30-second push-button timer, 110V AC. Easy to install. Write for Bulletin BW-54

**OZODRY**

**HURRICANE**

**ELECTRIC HAND DRYER**

Manufactured and Guaranteed by  
Michael Electric Co., Inc.  
New Haven, Conn.



Starting  
Low  
Price

**\$79.95**



**how a \$30  
purchase  
saves you thousands...  
in marking and shipping costs!**

With as little as \$30 worth of ALGENE marking equipment, many firms have made profits of several thousands of dollars due to savings in labor, time and inventory of printed boxes.

ALGENE Printers—with the new "Quick-Change" plates or with interchangeable type in any size from 1/16" to giant 1 1/2" letters — can effect these savings for you.

The self-inking, light weight ALGENE Printer performs nine times faster than stenciling, labeling, or rubber stamping — and your workmen prefer it! Thousands are in use successfully in all industries. Many sizes and models available. Write for free 8-page catalog today.

**algene marking equipment co.**

hand and automatic marking machines  
232-A PALISADE AVE., GARFIELD, NEW JERSEY

**... Gulf's incentive plan pushed its management's pay way ahead in the oil industry ...**

#### MAIL ORDER HOUSES

	Salary	Bonus	Pension	1953 Total	1952 Total
<b>MONTGOMERY WARD &amp; CO., INC.</b>					
Samuel Avery, chm.	\$101,000	---	---	\$101,000	\$101,000
Edmond A. Kridler, pres.	75,900	---	---	75,900	72,347
James A. Webber, v.p.	60,000	---	---	60,000	---
<b>SAUS, BORNACE &amp; CO.</b>					
Robert E. Wood, chm.	\$150,000	---	\$ 1,620	\$151,620	\$123,000
Theodore V. Hoffer, v. chm.	170,000	---	1,620	171,620	---
Chas. E. Hume, v.p.	100,000	---	1,620	101,620	---
Lawler & McCannell, pres.	135,700	---	1,620	136,620	125,000

\*Billed April 1954; replaced by T. V. Hoffer.

\*Profit sharing pension fund.

#### MEAT PACKING

<b>SWIFT &amp; CO.*</b>					
John Holmes, pres.	\$125,000	---	---	\$125,000	\$127,404
Porter M. Jarvis, ex. v.p.	70,000	---	---	70,000	61,154
*Year ended Oct. 31, 1953.					
<b>ARMOUR &amp; CO.*</b>					
Frederick W. Specht, chm. & pres.	\$132,000	---	---	\$132,000	\$134,704
Harry B. Eldred, ex. v.p.	89,000	---	---	89,000	93,334
*Year ended Oct. 31, 1953.					

#### NON-FERROUS METALS

<b>ALUMINUM COMPANY OF AMERICA</b>					
L. W. Wilson, pres.	\$168,500	---	---	\$168,500	\$174,300
Ray A. Hunt, chm.	90,000	---	---	90,000	90,000
F. L. Haggas, v.p.	98,750	---	---	98,750	78,500
<b>ANATOLIA COPPER MINING CO.</b>					
Corinthus F. Kelley, chm.	\$201,728	---	---	\$201,728	\$203,037
Robert E. Dwyer, pres.	151,735	---	---	151,735	128,317
Clyde E. Wood, v.p.	106,935	---	---	106,935	87,553
<b>KUWIBSCOTT COPPER CORP.</b>					
Edw. B. Cox, pres.	\$142,080	---	---	\$142,080	\$141,780
Anton Gray, v.p.	65,140	---	---	65,140	67,567
<b>PHILIPS DODGE CORP.</b>					
Louis E. Cohen, chm.	\$111,400	\$ 30,000	\$ 15,000	\$156,400	\$161,900
Robert G. Page, pres.	101,600	45,070	12,040	158,640	157,195
Cleveland E. Dodge, v.p.	34,651	37,300	12,739	84,690	99,400

\*Have reported up to \$5 and amounts are received under pension plan.

#### OFFICE EQUIPMENT

<b>INTERNATIONAL BUSINESS MACHINES CORP.</b>					
Trappes J. Watson, chm.	\$100,000	\$301,239	---	\$301,239	\$275,020
John G. Phillips, v. chm.	151,175	---	---	151,175	152,707
Thomas J. Watson, Jr., pres.	129,787	---	---	129,787	107,979
Albert L. Williams, v.p.	90,227	---	---	90,227	---
<b>BRANSTON-ROD, INC.*</b>					
James M. Rod, chm. & pres.	\$228,400	---	\$ 10,778	\$239,178	\$209,378
Harbert H. Goodman, v.p.	111,613	---	4,918	116,531	146,265
Harry Landsiedel, ex. v.p.	101,697	---	3,694	105,333	75,556
*Year ended March 31, 1953.					
<b>THE NATIONAL CASH REGISTER CO.</b>					
Stanley C. Allyn, pres.	\$240,000	---	---	\$240,000	\$233,362
Robert S. Oelm Sr., v.p.	131,350	---	---	131,350	---
John M. Wilson, v.p.	112,000	---	---	112,000	118,814
Edward A. Deeds, chm.	100,000	---	---	100,000	100,000

\*\$25,500 of this for expenses.

#### OIL COMPANIES

<b>GULF OIL CORP.</b>					
E. A. Swensrud, chm.	\$146,814	\$200,300*	---	\$346,814	\$310,560
J. F. Drake, chm. ex. com.	131,379	78,000	---	210,749	243,000
W. E. Whiteford, pres.	116,897	160,000	---	276,897	160,000
*Executive expenses in 1953.					
<b>STANDARD OIL CO. OF CALIF.</b>					
E. G. Pellis, chm.	\$160,075	---	\$ 15,177*	\$175,252	\$157,718
T. S. Peterson, pres.	150,000	---	14,217*	164,217	146,805
George Lund, v.p.	84,500	---	6,896*	91,396	88,127
*Compensation and other stock retirement plan.					
<b>STANDARD OIL CO. (INDIANA)</b>					
Almon W. Ruple, pres.	\$157,599	---	---	\$157,599	\$150,004
Frank O. Prior, ex. v.p.	130,538	---	---	130,538	---
Samuel S. Wilson, chm.	167,810	---	---	167,810	140,240

(Continued on page 70)



## Comfort

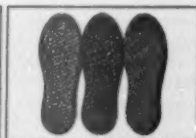
The three-toed sloth relaxes happily in this "comfortable" position. But man doesn't find comfort so naturally. He must *make* it with cushioning materials like Texfoam latex foam and Spongex cellular rubber.

As cushioning in furniture, Texfoam offers unequalled relaxation and comfort... comfort that remains unchanged year after year.

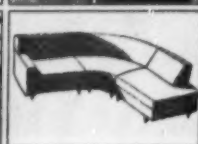
Texfoam cushioning in transportation seating makes travel smoother, more pleasant. Spongex, as soles and innersoles, cushions shock—puts feet at ease. Texfoam pillows offer cooler, more relaxing rest.

Cushioning is but one of the many functions of Spongex cellular materials. Others are insulation, sound and vibration damping, shock absorption, flotation and sealing. If you have a problem involving one of these, please write us.

Chair cushioning  
Soles and innersoles  
Transportation seating



Sofa-bed cushioning  
Bed pillow  
Sofa cushioning



# SPONGEX

*cellular materials*

THE SPONGE RUBBER PRODUCTS COMPANY  
17 Derby Place, Shelton, Connecticut  
Canadian Sponge Rubber Products, Ltd., Waterville, Que.



A PRETTY GOOD THEME SONG for the buyer of Multiwall Shipping Sacks.

He wants strong, sturdy sacks at the lowest cost consistent with full protection of his product from packing room to purchaser.

And he wants those sacks at the time specified.

Raymond has been producing Multiwalls long enough to know that the continued good will of the customer depends on a strict adherence to these requirements.

For painstaking cooperation in supplying Multiwalls adapted to your special needs, for kept promises of delivery and for clean, sharp, colorful printing, call in the Raymond man. THE RAYMOND BAG COMPANY, Middletown, Ohio. Phone 2-5461.

# Raymond

**MULTIWALL PAPER SHIPPING SACKS**

... CBS director and newscaster Ed Murrow got more salary than his president and chairman ...

OIL COMPANIES					
	Salary	Bonus	Pension	1953 Total	1952 Total
<b>THE TEXAS CO.</b>					
L. B. Leach, chm. & pres.	\$157,232	---	---	\$157,232	---
Augustus C. Long, ex. v.p.	127,300	---	---	127,300	---
R. F. Baker, ex. v.p.	99,000	---	---	99,000	---
<b>SOCOHY-VACUUM OIL CO., INC.</b>					
G. V. Nelson, chm.	\$125,000	---	\$ 18,711*	\$143,711	\$143,661
A. S. Jennings, pres.	130,000	---	19,094†	149,094	171,889
J. C. Case, v.p.	85,000	---	27,728‡	112,728	---
* \$1,120 was paid by company into Employees Saving Plan. † \$5,730 was paid by company into Employees Saving Plan. ‡ \$12,120 was paid by company into Employees Saving Plan.					
<b>STANDARD OIL CO. (IN. I.)</b>					
F. W. Abrams, chm.*	\$150,000	\$ 16,719	\$ 36,404	\$203,123	\$189,134
August Wilson, pres.	175,000	16,480	15,027	206,507	221,114
Charles E. Smith, v.p.	130,000	12,313	27,890	170,103	165,023
*Retired Jan. 11, 1954, replaced by Eugene Hansen.					
<b>PAPER PRODUCTS</b>					
<b>CROWN ZELLERBACH CORP.*</b>					
J. D. Zellerbach, pres.	\$101,850	---	\$ 12,000	\$113,850	\$110,883
H. L. Zellerbach, ex. v.p.	74,117	---	12,000	86,117	78,478
E. A. McDonald, chm.†	54,250	---	12,000	66,250	86,575
†Retired Sept. 30, 1952 as chairman, now a consultant. *Year ended April 30, 1953.					
<b>INTERNATIONAL PAPER CO.</b>					
John M. Hanson, pres.	\$150,000	---	---	\$150,000	\$150,000
Harold E. Weaver, 1st v.p.	125,000	---	---	125,000	125,000
<b>ST. REGIS PAPER CO.</b>					
Ray K. Ferguson, chm., pres.	\$ 92,820	---	---	\$ 92,820	\$ 92,480
Edward B. Gay, ex. v.p.	51,200	---	---	51,200	51,240
<b>RADIO &amp; TELEVISION</b>					
<b>COLUMBIA BROADCASTING SYSTEM, INC.</b>					
Frank Stanton, pres.	\$225,780	---	\$ 12,325	\$248,105	\$235,855
Wm. S. Paley, chm.	100,000	---	16,526	116,526	118,534
Edward R. Murrow, dir.	240,627	---	---	240,627	211,134
<b>RADIO CORP. OF AMERICA</b>					
Frank M. Folsom, pres.	\$165,000	---	---	\$165,000	\$165,251
David Sarnoff, chm.	100,000	---	---	100,000	200,251
<b>WILCO CORP.</b>					
William Rutherford, pres.	\$ 75,000	\$ 99,000	\$ 27,768	\$201,768	\$187,827
James H. Carmine, ex. v.p.	60,000	60,000	22,342	142,342	150,931
James T. Buckley, chm.	50,000	---	7,971	57,971	56,914
<b>RETAIL CHAINS</b>					
<b>E. S. KRISBE CO.</b>					
F. P. Williams, pres.	\$ 70,000	---	---	\$ 70,000	\$ 57,500*
C. E. Hoffmann, v.p.	70,000	---	---	70,000	67,717
T. G. King, v.p.	50,000	---	---	50,000	48,000
*Was v.p. in 1952.					
<b>F. W. WOOLWORTH CO.</b>					
Alfred L. Corwell, pres., chm.	\$201,613	---	---	\$201,613	\$211,374
Lewis H. Geyse, asst. treas.	106,300	---	---	106,300	72,797
James T. Lefkowitz, ex. v.p.*	99,462	---	---	99,462	68,988‡
*Assume president 1954. ‡Was v.p. in 1952.					
<b>J. C. PENNEY CO.</b>					
J. C. Penney, chm.	\$103,446	---	---	\$103,446	---
A. W. Hughes, pres.	103,446	---	---	103,446	\$110,832
George E. Mack, ex. v.p.	103,446	\$ 8,381	\$ 13,094	124,921	102,635
<b>STEEL</b>					
<b>U. S. STEEL CORP.</b>					
Benjamin F. Fairless, chm.	\$258,000	---	---	\$258,000	\$261,200
Clifford P. Hood, pres.	211,200	---	---	211,200	---
<b>BETHLEHEM STEEL CORP.</b>					
Eugene G. Grace, chm.	\$150,000	\$306,454*	---	\$456,454	\$456,652
Arthur B. Hamer, pres.	120,000	255,544*	---	375,544	375,544
Robert McMath, v.p.	75,000	204,436*	---	279,436	279,436
*Special incentive compensation.					
<b>JONES &amp; LAUGHLIN STEEL CORP.</b>					
Ben Morell, chm.	\$145,833	\$ 20,000	---	\$175,833	\$157,500
C. L. Austin, pres.	96,644	15,000	---	111,644	90,000
A. J. Hazlett, ex. v.p.	88,333	12,000	---	100,333	85,000

(Continued on page 72)

 AIR CONDITIONING



## CHECK ALL THREE

*Ask yourself these 3 questions before you buy any air conditioner for your business*

### 1. IS THE STYLING MODERN?

• G-E Packaged Air Conditioners are designed to stay in style for years and years... two-toned silver-gray finish blends perfectly with any interior... G-E Packaged Air Conditioners actually look as good as they make you feel.

### 2. IS IT DURABLE?

Here you see one example of G.E.'s durability: the famous G-E sealed-in-steel refrigerating unit. G. E. hermetically seals all three vital cooling system parts—compressor, condenser and motor. Trouble is sealed out, long life sealed in!

### 3. IS THE WARRANTY COMPLETE?

Now G. E. dares offer this unmatched protection: G. E. replaces entire sealed cooling system at no cost to you (not even for shipping or labor) if required under normal use during full 5-year warranty period.

GENERAL ELECTRIC CO., AIR CONDITIONING DIVISION, BLOOMFIELD, N. J.

# Packaged AIR CONDITIONERS

GENERAL  ELECTRIC

#### CHECK FEATURES OF G-E WATER COOLERS, TOO!

Cool, fresh water always... beautiful modern design... G-E 5-Year Protection Plan... dependable G-E refrigeration.





10,000 sq. ft. of Mississippi figured glass glazed in Mill's Movable Partitions. Glazing by George Behm & Sons, Dayton, Ohio



# MISSISSIPPI GLASS RINGS THE BELL AT NATIONAL CASH REGISTER

## "Borrowed Light" is Added to Advantages of Movable Walls by Installation of Translucent, Light Diffusing Glass

National Cash Register Company long recognized as a model of efficiency and management, makes walls do double duty and gain beauty. Office space flexibility is assured by the use of Mill's movable walls... while the added advantages of borrowed light provided by glass promote efficiency in present or future arrangements.

Translucent without being transparent, this modern glass protects privacy completely—yet floods adjoining areas with copious quantities of soft, diffused, glare-free light. Interiors appear larger, brighter, more cheerful... and more pleasant working conditions boost employee morale. The higher illumination levels makes seeing tasks easier—reduce costly errors. Glass has utility as well as beauty—it never wears out, never needs refinishing or painting.

Make light a part of your plans—let it boost your efficiency. When you build or remodel specify glass by Mississippi. Available in a wide variety of patterns and surface finishes.

Send today for free literature.



**MISSISSIPPI**  
*Glass* COMPANY  
SAINT LOUIS 7, MO.

## ... Officers at Colgate-Palmolive got the largest increases in the survey ...

### STEEL

	Salary	Bonus	Pension	1953 Total	1952 Total
<b>REPUBLIC STEEL CORP.</b>					
T. M. Grotter, chm.	\$300,000	---	---	\$300,000	\$300,000
C. M. White, pres.	300,000	---	---	300,000	300,000
T. E. Patton, 1st v.p.	140,700	---	---	140,700	119,533

### TEXTILES

<b>BURLINGTON MILLS CORP.</b>					
A. Spencer Love, chm.	\$140,000	\$ 4,917	---	\$144,917	\$106,379
A. C. Cowan Jr., pres.	110,000	3,688	---	113,688	106,977
Herbert M. Kellar, ex. v.p.	102,830	2,531	---	105,361	103,717
<b>J. P. STEVENS &amp; CO., INC.</b>					
John P. Stevens, Jr., chm.	\$ 80,000	---	---	\$ 80,000	\$ 80,000
Joseph H. Sutherland, pres.	79,167	---	---	79,167	80,000
Wilbert J. Carter, ex. v.p.	80,000	---	---	80,000	80,000

### UNITED MERCHANTS & MANUFACTURERS, INC.\*

A. W. Schwab, pres.	\$100,300	\$254,566	---	\$354,866	\$321,476
A. Harry Feldman, v.p.	40,280	122,878	---	163,158	143,741

\*Year ended June 30, 1953.

### AMERICAN VISCOSSE CORP.

Frank M. Reichel, pres. & chm.	\$125,000	---	\$ 50,000*	\$175,000	\$123,000
Gerald S. Tompkins, v.p.	82,500	---	---	82,500	80,477

\*Contract provides for awards of deferred compensation (bonuses) to become payable in 10 equal installments beginning first of year after he retires.

### TOILET PREPARATIONS

<b>PROCTER &amp; GAMBLE CO.*</b>					
Neil H. McElroy, pres.	\$123,000	\$115,000	\$ 29,228	\$267,228	\$269,630
Richard E. Duvorne, chm.	100,000	100,000	---	200,000	200,000

\*Year ended June 30, 1953.

### COLGATE-PALMOLIVE CO.

Lynd H. Lind, chm.	\$147,083	\$173,494*	---	\$320,577	\$117,235
Joseph H. McDonald, pres.	125,000	75,000*	---	200,000	---
Wm. L. Stess, H. ex. v.p.	99,537	75,000*	\$ 9,104	183,641	67,235

\*Payable in 5 yearly payments.

### TRANSPORTATION

<b>PENNSYLVANIA RR.</b>					
Walter S. Franklin, pres.*	\$125,730	\$ 9,125	---	\$134,855	\$126,717
James M. Symes, ex. v.p.	90,770	5,950	---	96,720	91,467

\*During this year, being replaced by Symes.

### SOUTHERN PACIFIC RR.

Donald J. Sullivan, pres.	\$126,664	---	---	\$126,664	\$100,499
George L. Boland, v.p.	60,000	---	---	60,000	58,232

### TIRE & RUBBER COMPANIES

<b>U. S. RUBBER CO.</b>					
H. E. Humphreys, Jr., chm. & pres.	\$299,101	---	---	\$299,101	\$279,207
John W. McGovern, v.p.	208,720	---	---	208,720	180,496

### PIRESTONE TIRE & RUBBER CO.\*

Harvey S. Pirestone Jr., chm.	\$142,000	\$ 42,400	\$ 23,012	\$207,412	\$198,968
Leo B. Jackson, pres.	115,507	34,630	26,961	177,101	176,216
John J. Shan, v.p.	92,000	87,400	14,217	193,617	---

\*Year ended Oct. 31.

### GOODYEAR TIRE & RUBBER CO.

E. J. Thomas, pres.	\$186,629	---	---	\$186,629	\$164,216
P. W. Diehl, chm.	141,093	---	2,174	143,267	127,174
P. E. M. Leroy, v.p.	131,380	---	---	131,380	127,703

### THE S. F. GOODYEAR CO.

John L. Collier, ch. & pres.	\$235,000*	---	---	\$235,000	\$235,000
W. S. Richardson, ex. v.p.	140,000	---	---	140,000	112,500

\*Richardson replaced Collier as president, this year.

### UTILITIES

<b>CONSOLIDATED EDISON CO. (N. Y.)</b>					
Boyd H. Tapscott, chm.*	\$ 72,367	---	---	\$ 72,367	\$106,480
Hudson E. Seering, pres.	96,533	---	---	96,533	96,430
Harold C. Forbes, ex. v.p.	82,100	---	---	82,100	80,530

\*Retired under company pension plan, Sept. 1, 1953 and is receiving \$27,336.

### COMMONWEALTH EDISON CO. (CHICAGO)

Charles Y. Freeman, chm.					
of ex. committee	\$108,330	---	---	\$108,330	\$150,000
Willis Gale, chm.	98,333	---	---	98,333	90,000
John W. Evers, pres.	54,853	---	---	54,853	50,000



© GF Co. 1954

## GF improves your firm's IF\* \*IMPRESSION FACTOR

*A distinguished **GF MODE-MAKER** desk in your Reception Room impresses visitors, clients and customers*

It's simply a matter of good business to look for charm, as well as good looks, in a *receptionist*. The same holds true of your *reception room* and its furnishings. That's why so many progressive companies have their charming, good-looking receptionists sitting at charming, good-looking GF Mode-Maker desks.

The Mode-Maker has all the fresh, clean lines of functional beauty that speak so well for any company. Because most receptionists "double in brass", the roll-away typewriter shelf (shown above at the girl's left) is there when needed ... out of sight when not being used.

The modern design of GF's Mode-Maker, its colorful finish and ultra-smooth, stainproof Velvolum top fully reflect the prestige of your organization. All this *plus economy*...for its cost comes to less than half of 1% of its user's salary over a span of 15 years and more.

Try out a handsome Mode-Maker in your reception room for a free 10-day trial. But we warn you...it will literally sell itself to your company's callers, to your own personnel...yes, and to *you*, too! Just call your nearest GF distributor or write The General Fireproofing Co., Dept. B-30, Youngstown 1, Ohio.



**MODE-MAKER DESKS • GOODFORM  
ALUMINUM CHAIRS • SUPER-FILER  
MECHANIZED FILING EQUIPMENT •  
GF ADJUSTABLE STEEL SHELVING**

NATIONAL SECRETARIES WEEK: MAY 23-29 • *Better Secretaries Mean Better Business*



serves as a prime contractor to the United States Government . . . and as a sub-contractor to Lockheed, Northrop, Douglas, Allison, Ford, and Westinghouse — leaders in the world of aviation.



**RHEEM** Manufacturing Company . . . Aircraft Division, Downey, California  
RESEARCH • DEVELOPMENT • ENGINEERING • PRODUCTION

## Here's How —

30 assorted companies are getting together  
to buy a big synthetic rubber plant

They are forming

**American Synthetic Rubber Corp.**

This will be run  
by a

BOARD OF DIRECTORS	
3 directors	
3 directors	
1 director	
3 directors	

elected by these  
30 companies

10 companies in di-  
versified rubber lines  
plus KYS Corp., joint-  
ly owned by 10 rub-  
ber firms

4 companies largely  
in shoe business

5 companies in wire  
& cable

American Cyanamid  
Co., chemical supplier

which elects a president

**President**  
unassociated with  
any of the firms

to run

**G R-S synthetic plant**  
purchased from U.S.

BUSINESS WEEK

## Big One Out of Little Ones

A group of executives from many different companies gathered in New York last week to put together a corporation (chart, above), which its host of backers hopes will be the successful bidder on at least one of the government's surplus synthetic rubber plants.

Bids on the plants—some choice facilities, others not too desirable—must be in the hands of the Rubber Producing Facilities Disposal Commission by May 27. Final settlement, though, may be months off, since the government plans to do some horse-trading after bids are in.

• **New Competitor**—One of the chief horse-traders will be the new American Synthetic Rubber Corp. Even though it will be bidding against the big chemical companies and the Big Four tire and rubber companies—U. S. Rubber, Good-year, Firestone, and Goodrich—the new combine will have a couple of things in its favor:

• American Synthetic is made up mostly of small companies, with a sprinkling of large and medium ones.

Members run from giant American Cyanamid Co. down to two-man partnerships, with the smaller outfits claiming virtually equal control.

Congress has made it plain that the sale must favor the small operator in contrast to the Big Four.

• It's an outgrowth of another joint-venture corporation—the Kentucky Synthetic Rubber Co.—which has been operating the G-R copolymer plant at Louisville, Ky. It is one of two such firms operating U.S. facilities on a fee basis. The other is Copolymer Corp., Baton Rouge, La., made up of eight companies.

Then, too, you can't overlook the fact that American Synthetic includes in its stable of companies such names as American Cyanamid, Anaconda Wire & Cable, General Cable, Dewey &

## 4 Things to remember about the Rock Island and its Freight Service



This railroad directly serves 14 mid-continent states: Arkansas, Colorado, Illinois, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, New Mexico, Oklahoma, South Dakota, Tennessee, Texas.



With its connections it provides a shipping service to the rest of America and to all the world.



Its diesel-equipped ROCKET FREIGHTS do a tremendous hauling job. They are smooth-rolling, swift and powerful.



Rock Island personnel is friendly, experienced and willing to assist in the solution of any of your freight problems.

For complete information consult your nearest Rock Island representative.



THE ROAD OF PLANNED PROGRESS

## Amana gets a problem off its chest



**HOT OFF THE LINE**, this Amana Food Freezer, now the pride of its maker, will soon be the pride of some home-owner. Problem was to get it to the new owners as flawless as when it left the factory. The sensible solution was to consult a packaging authority in this field for recommendations. That's when Atlas Plywood was called in.



**READY TO TRAVEL**. Atlas Plywood engineers designed a plywood container that would withstand bumps en route, in warehouse handling and in dealer delivery. Distributors praised the case because it provided full protection and relieved the headache of damage claims. Amana now packages its entire production in Atlas Plywood containers.

### Can your shipping costs be cut?

Let's try. No charge if they can't. Big savings if they can. Ship us your products in their present containers. Then —

We'll test them, duplicating all conditions of actual transit. You'll get a full engineering report, along with the clinic's recommendation for any improvement in packaging that may be needed. And you're welcome to watch the tests.

This is a **FREE** service by Atlas

Plywood. Without obligating you in any way it enables you to find out: (1) whether or not you can get a *safer* shipping container; (2) whether you actually *can* cut your present shipping costs, and; (3) just *how much* you can save.

Your Atlas Plywood representative (see Classified Telephone Directory) will be glad to make the arrangements. Or write to Atlas Plywood Corporation, 1432 Statler Building, Boston 16, Mass.

## Atlas Plywood

CORPORATION  
FROM FOREST TO FINISHED PRODUCT

Plywood Containers • Flush Doors • Hardwood Panels



Almy Chemical Co., Dunlop Tire & Rubber Co., and Hewitt-Robins, Inc., an industrial rubber products firm.

• **Fast Work**—It was Hewitt-Robins' president, Thomas Robins, Jr., who sparkplugged the whole scheme to bring the small and medium size companies under one roof. At first glance, it looked like an impossible task. In fact, some of the companies that finally decided to participate were still making up their minds late last week.

But Robins has had experience in running a joint-venture company. He is president of Kentucky Synthetic, which was formed in 1950 by 10 of the smaller rubber companies to run the Louisville plant. Last week, he was elected chairman and temporary president at the organization meeting in New York. Vice-chairman is Everett Morss of Simplex Wire & Cable Co.

When Congress voted to dispose of the government plants, Robins and his associates decided to round up as many companies as they could to raise capital and bid on one or more of the U.S. plants. The result was American Synthetic.

• **The Setup**—The new organization works like this:

Subscriptions for the new company were obtained, ranging from a low of \$5,000 from a little company to the top pledge of \$2-million from Cyanamid, which doesn't consume rubber but makes basic chemicals for its manufacture. Cyanamid will supply American Synthetic and also act as sales agent for synthetic rubber to companies outside the combine.

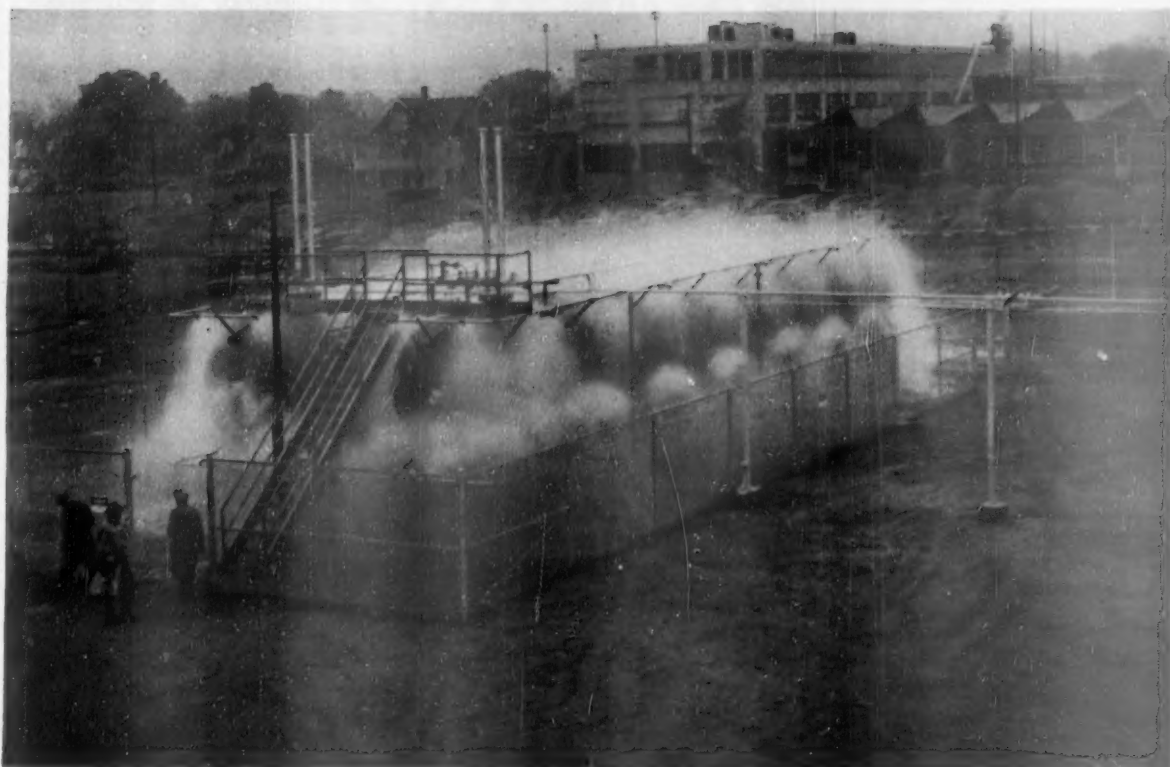
To pay for expenses of organization, the subscribers agreed to make down payments on their pledges. Once the corporation becomes a going concern—if the bidding is unsuccessful, of course, American Synthetic will be disbanded—the subscriptions become stock certificates grouped into four classes. The chart on page 75 shows how directorships are distributed.

Each company will be allotted a share of the production according to its capital interest in the venture. American Synthetic has been capitalized at \$6.6-million, with \$6-million already subscribed.

The rest is being held open for subscriptions of \$50,000 or more, to make sure that small companies that don't know about American Synthetic yet have an opportunity to join the venture if they wish.

American Synthetic ownership is split into four groups. Each owning company has one vote in its group, regardless of its shareholding in the corporation. A group of the smallest companies formed the KYS Corp., which has one combined vote in the Hewitt-Robins group.

The four groups will be informal



ROCKWOOD WaterFOG gives gas tanks cool protection.

## Cool companion for a town's best friends

The storage tanks above perform a friendly service for the nearby town.

They feed liquefied petroleum gas into the town's feeder system whenever extra gas is needed to maintain a constant gas supply to industries and homes.

An automatic Rockwood WaterFOG system acts as a cool companion to the tanks. In case of fire, it would automatically cover the tanks with protective WaterFOG. It would cool the tanks' surfaces, reduce heat

absorption, prevent tank rupture from internal pressure.

Heat-absorbing Rockwood WaterFOG is the result of "exploding" water into millions of particles that spread swiftly over a large area in seconds. Oxygen is cut off, temperature rapidly drops below ignition point

and WaterFOG particles turn into steam that smothers fire. Rockwood WaterFOG systems are made in a variety of types, both low and high velocity. They are but one of many ways in which Rockwood engineers water to cut fire losses.

### ROCKWOOD SPRINKLER COMPANY

Engineers Water . . . to Cut Fire Losses



**FIRE FIGHTING TRUCKS** use Rockwood FogFOAM turret nozzles to smother fire. Ground sweep nozzles protect truck with FogFOAM or WaterFOG. FogFOAM is a mixture of special Rockwood FOAM and water.



**REVOLUTIONARY ROCKWOOD WaterFOG SPRINKLER HEAD** is described in detail in this free illustrated booklet. Read all about remarkable new WaterFOG application! Send coupon for your copy today.

SEND FOR THIS INFORMATIVE BOOKLET

**ROCKWOOD SPRINKLER COMPANY**  
Fixed Installation Division  
112 Harlow Street  
Worcester 5, Mass.



Please send me your illustrated booklet on WaterFOG Sprinkler Fire Protection.

Name.....

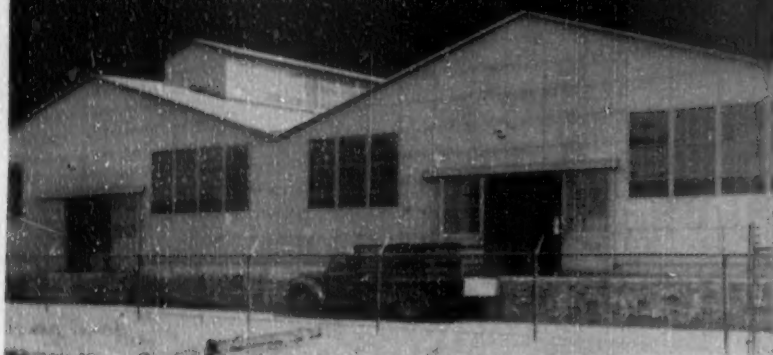
Title.....

Company.....

Street.....

City.....Zone.....State.....

# HOW TO KEEP YOUR DISTRIBUTORS HAPPY...



One way is to make sure that they are able to sell a *complete line* of your merchandise. That they are not losing sales because of single item shortages or back orders not delivered.

Keeping distributors happy may require manufacturing for inventory, so that you can ship needed numbers out of stock. Or be able to make up and ship mixed cars.

Inventories require storage space. Accessible, economical, safe storage space. Where to get it? In a Truscon Standard Steel Building.

Perhaps you have the necessary land near your plant. Or, you can acquire it in a convenient location. Truscon will deliver a complete steel building "package" to that site. And, will work with local contractors to get your new building up and in use.

Truscon Steel Buildings are mass-manufactured in a wide range of standard designs. You adapt them to your own space needs and your budget. They are low in cost, are quickly erected, have good salvage value, can be dis-assembled and re-erected as your needs change. As permanent structures, they offer fire resistance, low upkeep, and high investment value.

If a sales situation finds you extra "distribution conscious", it's a good idea to ask Truscon building engineers to look into the problem. A Truscon Steel Building Catalog on your desk may spark an idea, too. Just write:

TRUSCON®



**TRUSCON STEEL DIVISION  
REPUBLIC STEEL**



1076 ALBERT STREET • YOUNGSTOWN 1, OHIO  
EXPORT DEPT.: CHRYSLER BLDG., NEW YORK 17, N.Y.

A NAME YOU CAN BUILD ON

stockholder committees. They'll get together periodically with the directors to be briefed on what's going on and to air any suggestions or complaints.

• **Bidding**—Robins says capital should be sufficient to back up the company's bids and still leave plenty of working funds. Successful bidders are required to put up only 25% of the purchase price of any facility, with 10 years to pay off the remainder.

What plant or plants will American Synthetic bid on? Robins isn't talking—and neither are any of the 60 or so other companies that also probably will bid. Washington observers feel that normally an operator of a plant will prefer to bid on the place he has been running under contract, since he knows the plant and has his supervisory and operating people.

On the auction block are 13 GRS plants, two butyl rubber, eight petroleum butadiene, two alcohol butadiene, one styrene, and a dodecyl mercaptan plant.

However, because of the differences in manufacturing costs—the Louisville GRS operation is reported to cost more to run than some other facilities—American Synthetic may have its eye on more desirable Gulf Coast plants. It's assumed that the Copolymer Corp. group will bid on Baton Rouge.

Robins admits that the American Synthetic combine is an unusual one because of its complexity and the number of companies involved. But it matches up to the situation, he says: "It's the first time an industry has ever been denationalized in the U. S."

## MANAGEMENT BRIEFS

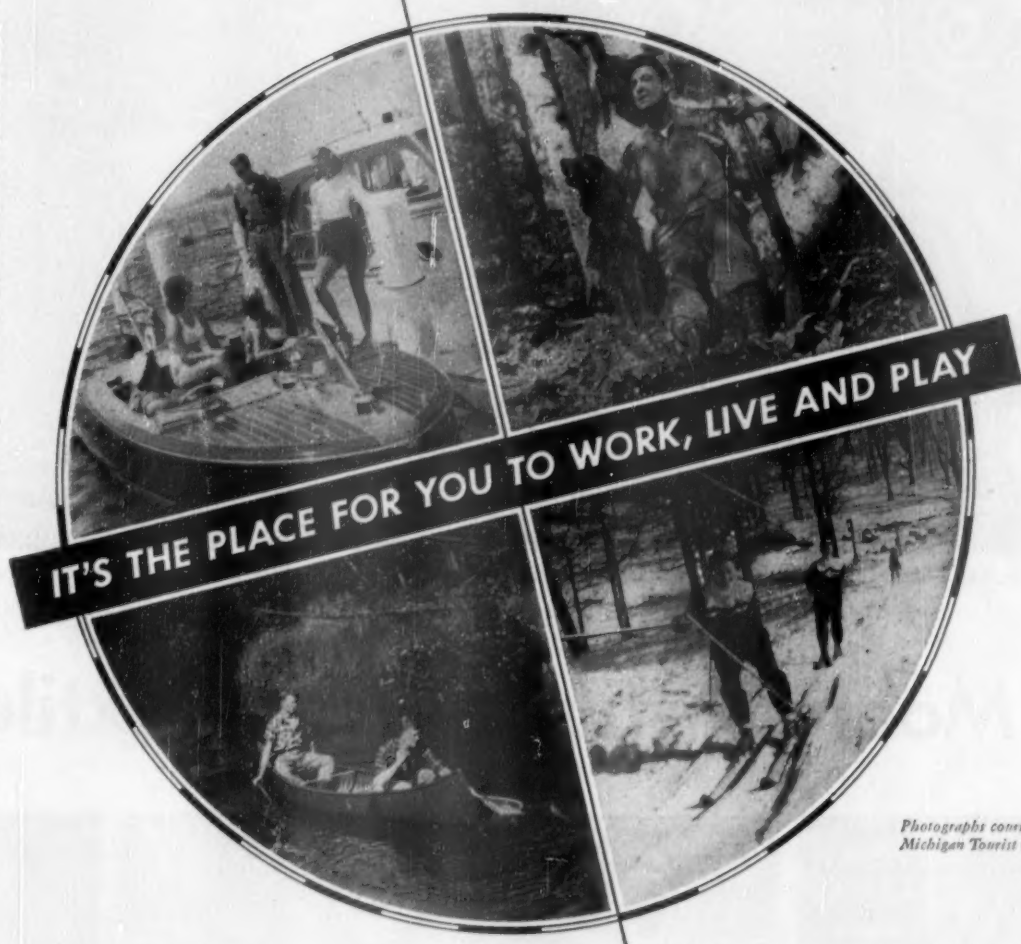
James P. Falvey is now executive vice-president of Electric Autolite Co. As such he's the top officer of the big auto supplier. The board of directors chose him after the death of the chairman and president, Royce G. Martin. Both top spots were left vacant.

Johnson & Johnson has named Frank A. Cosgrove, treasurer for the past 22 years, as "ambassador at large" beginning July 1. Robert W. Johnson, chairman, says Cosgrove will handle special assignments among Johnson & Johnson's group of 9 domestic and 20 foreign subsidiaries.

Universal C.I.T. Credit Corp. is starting a training program for its 450 branch managers. They're being called into New York, 40 at a time, where they will live and attend classes for two weeks at the Beaux Arts Hotel. The program is an outgrowth of a home office training school started last fall.

# OUTSTATE MICHIGAN

**Has Everything! It's Production  
Land, Market Land and Vacation  
Land...ALL IN ONE!**



*Photographs courtesy of  
Michigan Tourist Council*

It takes a specific  
location with  
proper facilities  
**TO FIT YOUR NEEDS.**  
Write us  
**YOUR REQUIREMENTS.**



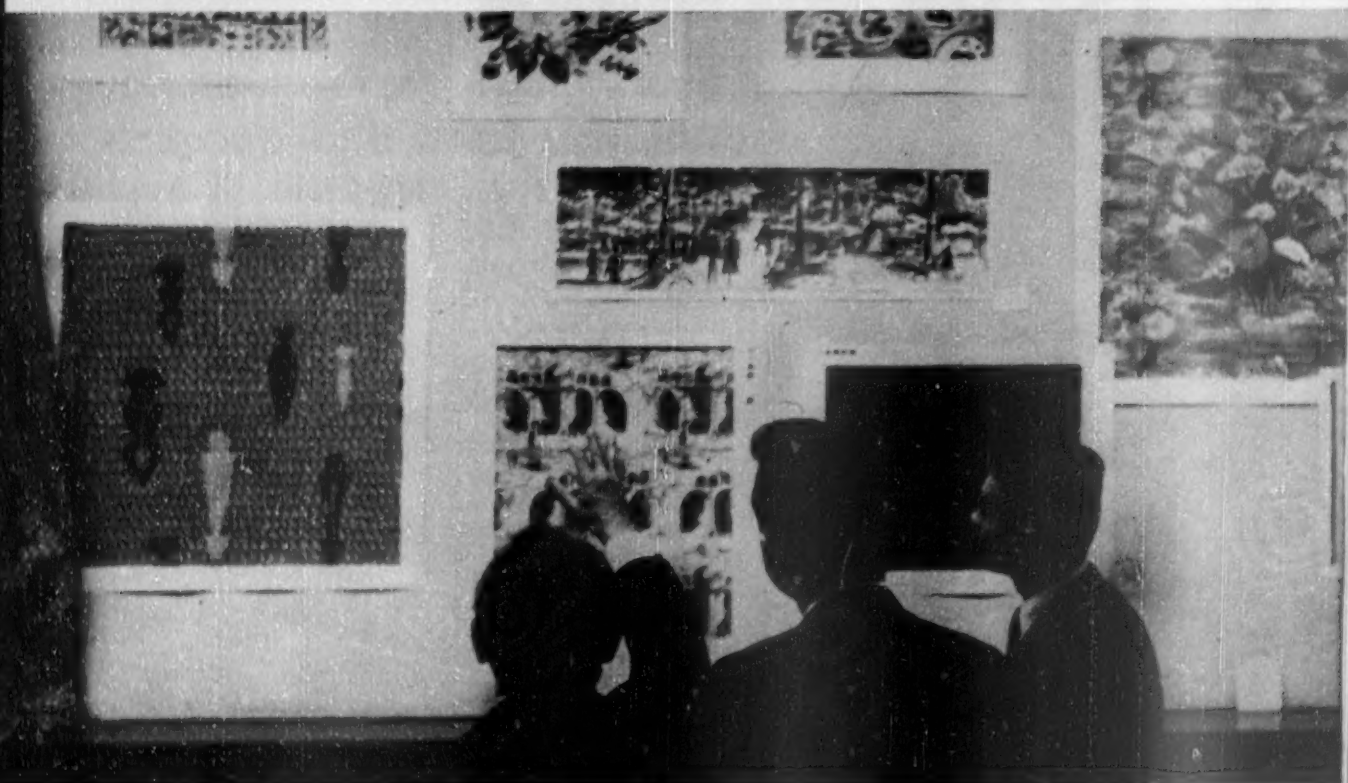
Here you will find an invigorating climate . . . world famous industries . . . abundant agriculture . . . the world's greatest fresh water supply . . . all ideally located in relation to the great midwestern markets. Here too you will enjoy one of the world's great vacation lands. You will like Outstate Michigan and its people will welcome you.

**Mr. Business Man — VACATION IN OUTSTATE MICHIGAN — SEE  
ITS MANY INDUSTRIAL ADVANTAGES AND YOU'LL BE CONVINCED**

FOR INFORMATION CONTACT  
INDUSTRIAL DEVELOPMENT DEPT.

**CONSUMERS POWER COMPANY**  
JACKSON, MICHIGAN

# EDUCATION

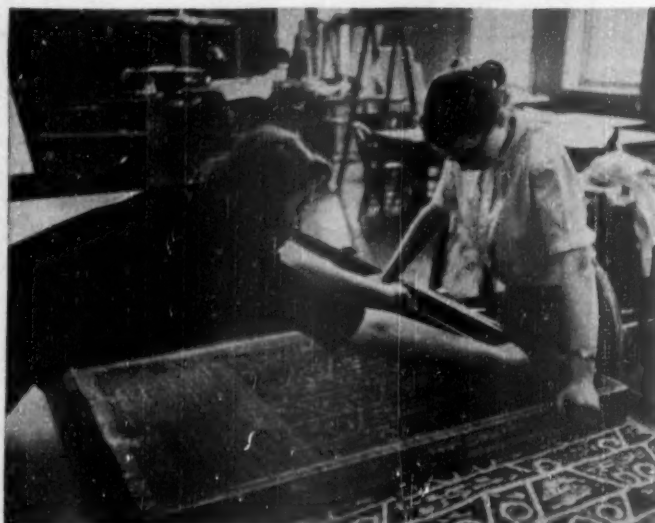


TOP DISPLAY in student design contest of Moore Institute of Art, Science, and Industry is picked by textile men Herman Blum (left),

## Moore Institute Girls: Textile

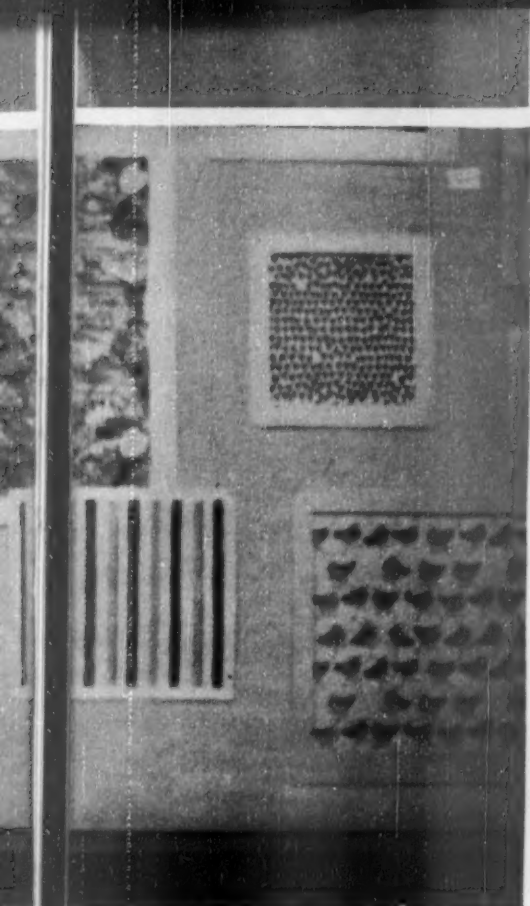


DESIGN classes at Philadelphia school are backed up by practical experience in . . .



TECHNIQUES that go into the manufacture of a fabric—such as method of silk screen printing—and . . .





Peter Kaiser (center), and James May.



PRO QUALITY swayed Kaiser (left) to buy 10 designs. Sale didn't surprise . . .

## Design Men Woo Them

When the Moore Institute of Art, Science, and Industry staged the finals of its annual student textile design contest last week, two girls waited tensely for the outcome. Each of the pair still in the running pinned her hopes on winning the top award, a \$1,000 traveling fellowship to Europe. Both got more than they bargained for when the three textile men picked by the Philadelphia school to act as judges swung into action.

Gray goods converter Peter Kaiser of D. B. Fuller & Co., Inc., took time out from his role of critic to snap up 10 original designs right from the wall displays.

He has already slated some of them to go into production in September and hit the market next spring in women's sport clothes. James May, artists' agent from a New York City design studio, took an option on 13 designs for sale to clients in converting, floor coverings, wallpaper, table linens, and the dress

field. Then he offered one of the girls a job.

The job offer went to Joan Nenninger (center picture, left), who came off runner-up to contest-winner Barbara Briggs (center picture, right). Kaiser and May's design choices included work of both these girls and of several other students.

• **Art for Industry**—Actually, no one at Moore was really surprised when Kaiser, May, and Herman Blum, Philadelphia manufacturer of Jacquard woven figured fabrics, pronounced the work had professional sales pull. Since its founding as a design school for women in 1844, Moore has specialized in sending a steady flow of designs and designers from the classroom to the marketplace.

Moore president Harold R. Rice departs from a flock of other art schools in taking as a first principle art for industry's sake. Rice doesn't hold with the theory that art should educate industry; to turn out professionals, he



USE OF FABRIC—how it's fashioned and sewn into dresses and other garments.

wider and wider use

## PEARLITIC MALLEABLE CASTINGS

as engineers become aware  
of its many advantages

**DESIGN ADAPTABILITY:** Because of its good fluidity, it can be cast in thin sections and in complicated shapes.

**HIGHER STRENGTH:** Ultimate strength range between 60,000 and 90,000 psi; yield strength between 40,000 and 70,000 psi.

**EASILY MACHINED:** Machinability index (B1112 Steel-100) ranges between 80 and 90.

**WEAR RESISTANCE:** Withstands excessive wear under heavy loads at high speeds.

**LOCALIZED HARDENING:** Sections of the casting can be flame hardened or induction hardened before or after machining.

**BEARING PROPERTIES:** Good non-seizing properties in metal-to-metal contact.

**FINE FINISH:** Can be given a very smooth finish where desired.

You will find many applications for Pearlitic Malleable castings—particularly as a replacement for forgings, stampings and weldments—where reduced weight, less machining time, fewer assembly operations and better appearance are important production and sales considerations.

A-6286

# NATIONAL MALLEABLE AND STEEL CASTINGS

The Nation's largest independent producer of malleable and pearlitic malleable



**COMPANY**  
Cleveland 6, Ohio



MOORE GIRL looks across street at school that guarantees her an entree in textiles.

brings a big dose of the textile industry, its needs and realities, into design education.

• **Job Insurance**—Moore's bill of fare is a four-year program leading to either a college degree or professional diploma. The basic ingredients are courses in advertising art, art education, fashion design, illustration, fashion illustration, interior design, painting and textile design. To get a Bachelor of Fine Arts degree, a girl tacks on four or five liberal arts courses. If she wants a Bachelor of Science in art education, she must also do some practice teaching.

But a diploma is all a girl really needs to get into professional art—especially if she has Moore's name behind her. Industry's high rating for the school shows up in the fact that almost any Moore girl worth her salt has a job lined up before she graduates. One New York design house has a standing order for Moore graduates.

• **Hard Facts**—The reason, James May explains, is simple. Moore graduates in his organization have proven that any girl the school turns out has a firm grasp of the type of work industry demands—and needs no apprentice training. That's a direct reflection of the institute's determined efforts to keep a finger on the trade pulse in advertising art, fashion work, illustration, and particularly textile design.

One of Moore's tenets is that the design doesn't stop at the drawing board. It's not enough for a girl to dream up a pattern with eye appeal; she has to see it in terms of the machines that turn out pattern fabrics, which are printed or woven.

Before she's through, a girl knows just how many ties and picks there are per square inch on a Jacquard loom, so her Jacquard designs are geared for the basic manufacturing step. Students learn to



**The Food Processing Industry.** Throughout the plant—from the "kitchen" to the shipping department—these handy Scott Wipers are enabling employees to do a cleaner, more efficient job.



**The Industrial Bearing Industry.** Here's where you need a rugged wiper. One that can be used in solvents—and used again. That's the Scott Industrial Wiper—strong, two-ply and absorbent.



**The Aircraft Industry** requires a mobile source of oil-absorbing wiping material. Wipers have to be strong for heavy work, soft enough for polishing fine metals.

**Scott Industrial Wipers**—another Scott product that is changing America's way of doing things.

# A big job in any industry

**Designed to meet a human need, Scott Industrial Wipers bring a new standard of safety and efficiency to industrial wiping.**

**Industrial Wiping**—the cleaning away of excess grease, dirt, and filings—can now be a scientific step in production—measurable in cost, safety and efficiency.

Scott Wipers are made of a strong, two-ply, "perf-embossed" paper. Soft, absorbent, yet strong... even when soaked in industrial solvents.

A Scott man stands ready to demonstrate these versatile Scott Industrial Wipers in your plant. Simply mail the coupon below or contact your local Scott Distributor.



**Hands of Production**, your most important tools, are protected by disposable Scott Wipers. Harmful metal filings are thrown away along with the used wiper.



Scott Paper Company,  
Dept. W-5, Chester, Pa.  
Please send me full information on  
Scott Industrial Wipers.

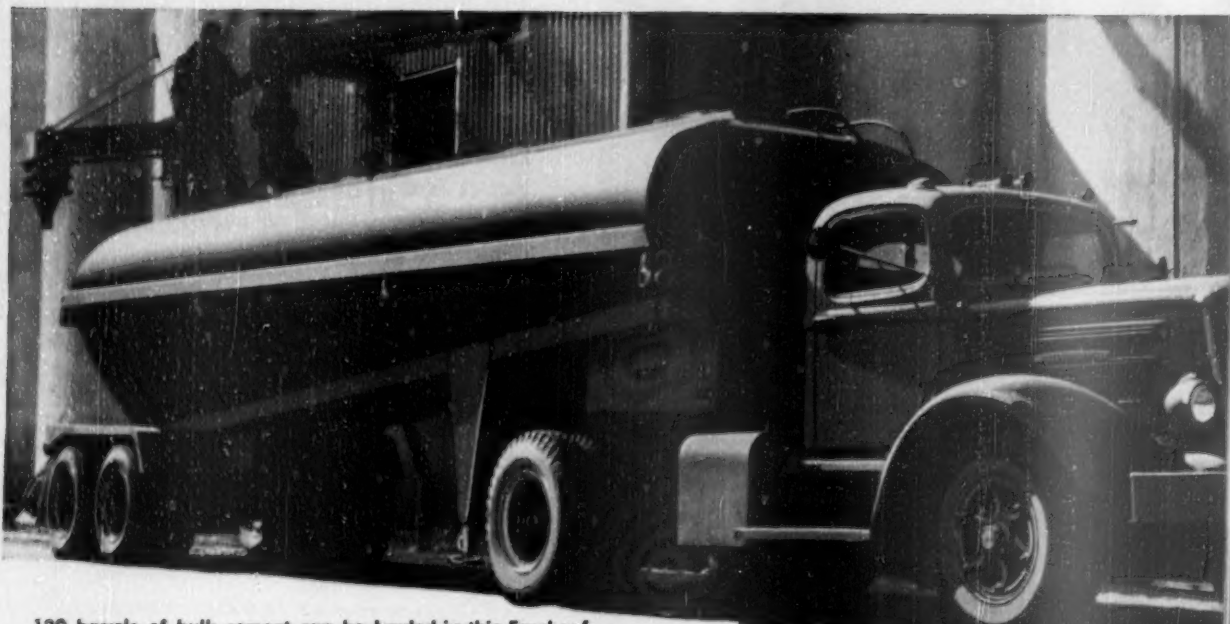
Name

Company

Address

City  State

# NEW WAYS



120 barrels of bulk cement can be hauled in this Fruehauf Air-Slide Cement Transport, which is also adaptable to other powdered materials. A new, faster means of discharge, by air and gravity, speeds up the delivery process.

*Here Are Just A Few  
Profit-Producing Units In The World's  
Greatest Specialized Trailer Line!*

## FOR THE CONSTRUCTION INDUSTRY



Platform Trailers

Carryalls



Hot Asphalt Trailers

Hopper-Type  
Dump Trailers



## FOR THE CHEMICAL INDUSTRY

Acid  
Transports



Anhydrous Ammonia Transports



Latex Transports



Hot Sulphur  
Transports

# TO PROFIT IN THE CONSTRUCTION INDUSTRY!

***And Many Other Businesses Can Profit Greatly  
And Speed Up Operations By Inquiring Into  
Fruehauf's Newest Specialized Hauling Equipment!***

EVERY BUSINESS MAN—not just in the construction field—is wise to give some thought to the ways in which he can increase his profits by the use of Fruehauf Trailers.

For, as in the case of this Air-Slide Cement Transport, there are many new, highly-specialized Fruehauf hauling units adapted to the rapid tempo of modern industry and filling the need for fast, *direct* transportation to any location, however out-of-the-way.

Now, nearly any bulk or packaged material or product can be moved swiftly by Trailer, at lower cost or greater profits to the shipper. In fact, many businesses are presently being *built*, or at least greatly expanded, on the basis of more rapid, efficient shipment via specialized Fruehauf Trailer equipment.

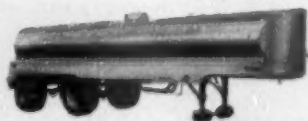
Consider how your company can profit with Fruehaufs—and write today for more information.

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Refrigerated Vans

Bulk Flour Transports



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"ENGINEERED TRANSPORTATION"

# FRUEHAUF

## TRAILER COMPANY

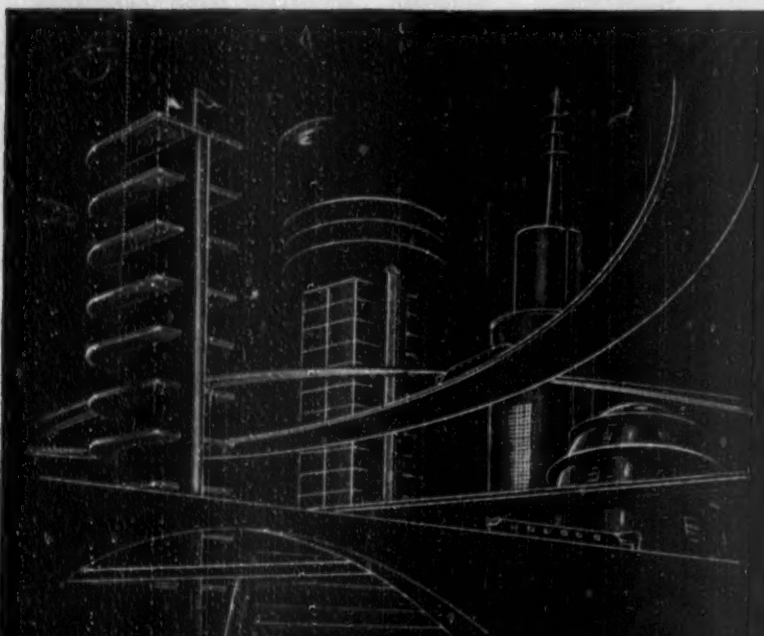
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Detroit 32, Michigan

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- ☐ Please send a copy of the booklet "New Ways To Profit."
- ☐ Please send a complete Fruehauf catalog.
- ☐ Please have a Fruehauf salesman call to make a "Transportation Cost Analysis" of my business.

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Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_



## Old Machines Can't Help You Plan for Tomorrow



LEES-BRADNER  
MODEL 7-A  
ROTARY HOBBER

*O*ld and battle-scarred veteran machines that have been hobbing (or hobbling) beyond their time make a poor foundation for tomorrow's production plans.

If you visualize big things for your company's future—new products and volume production—

better look at your old machines with a sharp and critical eye. Remember, their productivity is going down—not up. And they're costing you more every day to operate.

Your Lees-Bradner representative can give you many a helpful tip on hobbing for profit. For Lees-Bradner machines are built with an eye on the future and the reserve capacity to meet tomorrow's production plans.

Why not get in touch with him soon? Or write directly to the company.

*the* **LEES-BRADNER**  
CLEVELAND 11, OHIO, U.S.A. *Company*



5H SPINE HOBBER



7-A ROTARY HOBBER



CRI-DAN "D"



1H THREAD MILLER



12-S HOBBER

**"... returns from the students' sales add up to more than a token business..."**

**MOORE INSTITUTE** starts on p. 80

figure just how many rollers or screens will be used for their prints. They take into account the value of the four-way design—which looks the same from all sides—in volume cutting for manufacturers who turn out thousands of dresses in the same fabric.

Moreover, Moore's 250-300 female students keep a close eye on market trends. They know that textures are currently on the upswing and Jacquards are losing ground. As Jacquard maker Blum put it, they're aware that "nowadays people don't want their furniture to do anything but sit there and be quiet."

• **Close to the Fount**—Moore's faculty of about 50 teachers figures that the most effective way to drive home to the girls just what will sell and what won't sell is not by doling out facts in a lecture course, but by bringing the girls directly in contact with the needs of the trade.

Manufacturers and representatives of design outlets are urged to come into the school any time during the year and size up the girls' work as sales possibilities.

Some manufacturers even come in with specific needs and problems the girls can get their teeth in. Scranton Lace Co. asked Moore students to work out a whole new line of tablecloths.

Another company asked for a line of designs for shower curtains. Baldwin Mfg. Co. selected its entire new Jacquard line from designs girls submitted. Moore students also turn out designs for several wallpaper manufacturers.

The designs in this year's competition are potential material for roller prints, screen prints, tapestries, damasks, and textures for drapes, upholstery, dress silks, cottons and rayons, scarves, kitchen curtains, and tablecloths.

Returns from the students' sales add up to more than a token business. In 1953—a bad year for textiles—design classes tallied up \$1,475 in sales. They racked up \$3,500 in 1952. "Very often a student can work her way through school by selling her designs," Dr. Rice claims.

The calculated practicality of the girls' designs has also paid off repeatedly in competitions sponsored by commercial fabric houses to uncover new designs.

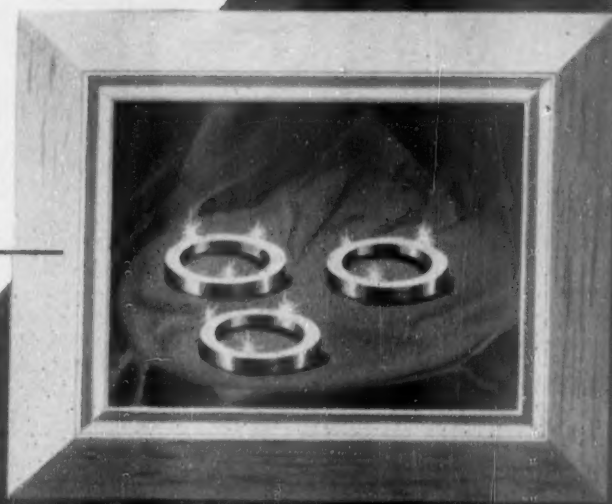
Moore took seven out of 10 prizes in a colonial drapery contest; they pushed their showing up to eight out

# Diamond Rings

**\$2799<sup>00</sup>**

**Reduced to**

**\$565<sup>00</sup> !**



Diamond rings? . . . not exactly. Anyone in industry will know they're diamond grinding wheels. Our story is about a Reading, Pa., plant where these valuable wheels on two grinders were wearing out to the tune of \$2799.00 a year!

Downtime to replace wheels, time-outs for wheel dressing, mounting lubricant expense—all added to the cost. So, plant engineers called in a trained Alemite Lubrication Specialist. After careful study, an Alemite Automatic Lubrication System was recommended and installed.

Results were fantastic! Now one grinder uses only 2 diamond wheels a year . . . the other, only one wheel. Total cost—\$565.00. Only a few ounces

of oil mixture is used—against quarts before. Wheel dressing is eliminated. Operators get a smoother grind. No oil mess or bother. Downtime for wheel replacement cut to minutes per year. The first year the Alemite System paid for itself 8 times over for a total saving of almost \$2,000.00!

\*\*\*

Whatever you manufacture, chances are your machines will make more money for you if equipped with Alemite Lubrication Systems.

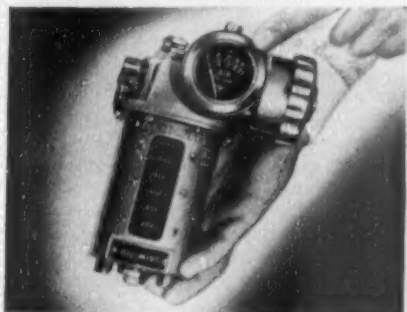
Because human error is eliminated, and machines need not be stopped for lubrication, you get these important advantages: constant "top" performance, longer life. Fewer hours to

make more products, better. Less rejects and spoilage. You can plan tight production schedules and keep them!

If you have a lubrication problem in your plant, why not fill out and mail the coupon? By return mail, you'll receive a valuable free booklet on Alemite Lubrication methods. At your request, a trained Alemite Lubrication Specialist will give you an "on the spot" demonstration of how Alemite Lubrication methods can save you money throughout your plant—be it large or small!

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Ask Anyone in Industry



**This is Alemite Oil-Mist . . .** the money-saver! A completely automatic, completely enclosed system which atomizes oil into mist. Distributes it through tubes to open surfaces or bearings, where it is applied in a continuous, uniform film that lubricates and cools at the same time. Also delivers oil in spray form . . . or in a condensed oil-mist. Operates only when machine is in action.

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# *If all sales managers kept time sheets... they'd be Cappel, MacDonald clients!*

■ Again and again, sales managers have proved that the chance to win a millionaire's vacation or luxury merchandise prizes can stimulate salesmen to unprecedented effort.

But executive time spent planning, creating promotion material, handling detail . . . time worked on the night shift or stolen from other vital jobs . . . can make incentive campaigns a heavy burden.

To this dilemma, Cappel, MacDonald offers a simple solution. For

the cost of the prizes and printing, C-M specialists will plan and service your entire campaign—leaving you free to determine policy, spark meetings with your personal enthusiasm and attack your sales problems on other fronts.

Compare the time-cost of a C-M sales incentive campaign with any other method of producing extra sales in the face of today's sharpened competition. We believe you will agree: If all sales managers kept time sheets, they'd be C-M clients!

## *C-M Offers Complete Prize Promotion Service*

### **WHAT DO YOU WANT TO DO?**

Increase sales? Promote the use of merchandising material? Open minds to sales training? The C-M man can give you time-saving advice on objectives, timing, budgets, ways to avoid slumps and maintain interest throughout the campaign.

### **EACH PLAN IS CUSTOM-MADE**

Yet C-M specialists—drawing on 32 years' experience with thousands of sales incentive campaigns—can often cut planning time from weeks to days. On the average, our clients spend only 4 to 6 hours studying, analyzing and approving plans.

### **CONTINUING PROMOTION**

Professionally-planned promotion is essential to success. And C-M offers the skill of the only complete creative department in the incentive field—to prepare sales meeting material and a series of colorful mailings to participants and their families.

### **NATIONALLY-ADVERTISED PRIZES**

Merchandise from the famous C-M catalog tempts salesmen, their wives and children. Selections in every price class mean extra effort from average men, as well as stars.

### **ALL-EXPENSE TRIPS**


You can offer a luxurious vacation, a sea or air cruise, a meeting at a famous resort. Every detail is arranged to give your men fine accommodations and preferred treatment.

### **WHAT ABOUT COST?**

Prizes are put on a pay-as-you-go basis; you have no investment. Printing is billed at cost. Creative work, planning and detail service cost nothing extra.

*For free literature, phone or write "The Originators of Merchandise Incentive Plans" CAPPEL, MACDONALD & Co., DEPT. B-45, DAYTON 1, OHIO.*

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Dayton, Ohio  Offices in principal cities and Canada

MERCHANDISE INCENTIVES • PREMIUMS • TRAVEL INCENTIVES

*"... rigorous enough to wash out a high percentage of the freshmen..."*

MOORE INSTITUTE starts on p. 80

of 10 in a Moss-Rose Mfg. Co. draperies competition and also in a world-wide upholstery contest.

• **Fashion Teamwork**—Moore's close tie with the textile industry doesn't end with textile design. It's proved equally fruitful in the related field of fashion designing. Moore students recently mapped out a complete line of children's clothes for one manufacturer. And each spring the fashion design aspirants put on a show in a Philadelphia department store. They model their own creations, ranging from formal gowns to play clothes, for an audience that's usually spotted with manufacturers' buyers. Sometimes the girls get their fabrics from their classmates in textile design.

• **Teaching Sideline**—While the fashion design students have to take their cue from Paris styles, the textile design girls need look no farther than Chicago, Los Angeles, New York or High Point, N. C. They watch the styles set in textiles by free-lance stylists or staff stylists of manufacturers, who get their guidance and inspiration from the current and past market, interior design shows, and new homes.

Three of these stylists are on Moore's faculty. Two of them—Edna F. Leonhardt and A. Charles Barton—have their own design studios with sizable clienteles and double as agents for their pupils. Mme. Yvonne Delattre, head of the textile design department, used to be a stylist for Moss-Rose.

These experts give their classes training rigorous enough to wash out a high percentage of the freshmen—despite the fact that applicants are picked carefully, partly on the basis of a portfolio of original work. Before she can compete in the annual design contest, a Moore girl has to boast an average of 90 or better, and agree to work in industry between one and three years before going abroad.

• **Strictly for the Girls**—These stylist-teachers are the ideal expression of the professional approach to art in industry that Mrs. Sara Peter had in mind when she founded Moore's forebear, the Philadelphia School of Design, in the middle of the Nineteenth Century. In 1932 the school merged with the Moore Institute of Art, Science and Industry, set up in 1921 under the will of Joseph Moore, Jr. On one point the terms of Moore's will are rigid: It stipulates that the entire bequest will be forfeited if one cent is spent to educate a male.



## Sub-Launched Missile Gives Navy New Striking Power

CONTROL OF REGULUS HELD "UNCANNY"... "BIRDS" CAN BE RETRIEVED DURING TESTS

### THE STORY BEHIND THE STORY:

■ When a guided missile launched from a submarine hundreds of miles off shore can be held to an accurate course at speeds approaching Mach 1, and precisely aimed at a specific inland target—that's news, *bad* news for a possible enemy. And, when costly models of the missile can be recovered and re-used time after time for evaluation and training, that's news, too—*good* news for American taxpayers.

■ On both counts, the Navy's Regulus, developed by Chance Vought Aircraft, Inc., is constantly in the headlines.

■ Providing the stability that holds Regulus on its course with a vise-like grip—and assuring recovery during tests—is a specially-designed Automatic Pilot, created by Sperry. Like its relative, the famous Sperry Gyropilot® Flight Control favored by the military and leading airlines, this electronic "brain" is sensitive to the slightest signal change in the flight path. Under its command, powerful servos or "muscles" of the control system

make instant corrections—fly Regulus unflinchingly through intricate maneuvers at all speeds and at all altitudes.

■ There's a mighty difference between the automatic controls created by Sperry for this newest guided missile of the Navy, and those provided by Sperry for the Navy's first guided missile back in World War I days. But they're alike in this respect: Both resulted from an unmatched combination of skillful engineering *plus* specialized experience in electronics and gyroscopes, and precision in production.

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**SPERRY** GYROSCOPE COMPANY

DIVISION OF THE SPERRY CORPORATION • GREAT NECK, N.Y.

## PRODUCTION

# Selling the Analog Computer

● It isn't an easy job. The more complex digital computers have taken most of the fame and fortune since they went to work during World War II.

● But analog makers feel they have some telling sales points—mainly simplicity and low price.

● While analogs won't handle really complicated problems easily, they're suitable for a host of engineering applications in almost any manufacturing plant.

**Problem:** You're a manufacturer of springs for automobile suspensions. You want to test the performance of a newly designed spring. Your engineers want to see how it stands up in road service compared with the ideal operation of a theoretically perfect product.

**Solution 1:** Fit an automobile with the new spring, and equip car and spring with a variety of measuring devices. Then drive the car over a proving ground that duplicates the rough bumps and knocks of actual service. That way, the new spring will get a thorough, true-to-life shakedown. One measuring device will gauge the spring's resiliency as it squeezes together and spreads apart over the bumps. Another will measure the force of the bumps. The devices will make records of these factors as the car travels. Back in the office later, engineers can study the records, fit the different conditions to a formula, and mathematically work out the answer you want.

**Solution 2:** Turn the spring over to a top-flight mathematician and a digital electronic computer. The mathematician will first collect all of the factors that represent the many conditions the spring goes through during the test. Next, he will design a formula, probably one by calculus, that combines the factors. Each one of the factors is really a variable. The resiliency, for example, can be a series of values that might range from 15 through to 48.

The mathematician then adjusts the computer so that it operates according to the formula, and feeds the factors into it. When it's turned on, the computer will calculate the formula, step by step, doing the arithmetic for each of the variable factors while the others remain fixed.

After finishing one step, the machine stores that information in its memory temporarily, and picks up the next

variable in the formula. After it finishes the last step, the machine has worked out the possible combinations of the variable factors for each split-second period of the test. The solution comes out as thousands of figures—several separate mathematical answers to each of the combinations. And probably the answers will be more information than you really want.

**Solution 3:** Look at the operation of an analog computer, and you'll find that its method of computation is closest to what the spring does during the road test. You first adjust the analog's controls for each of the values, such as resiliency, the force of the bumps, the characteristics of the spring's material. Inside the computer, electrical and mechanical changes and movements will take place, analogous to what happens to the spring. In effect, the computer will simulate a road test by electronically and mechanically putting the spring through an arithmetical shakedown.

You can get the answer in various forms. But unlike a digital computer with its split-second, many-numbered answer, an analog supplies a solution that's a continuous value. The answer can come out as a kind of profile—a wavy line drawn on a piece of graph paper or projected on the screen of an oscilloscope.

• **New Effort**—The giant electronic "brains," called digitals, originally copped most of the fame and sales in the computing field. The reason was that there were many enormous problems lying around—problems that could not be solved easily by pencil-and-paper methods. During the war, the great capacity and speed of even the first crude digitals helped solve problems that would have kept a room full of mathematicians busy for a decade. The computers worked out many of the

tricky and numerous ballistics problems in the fields of ammunition, heavy guns, and the atom bomb. And since V-J Day, they have mechanized the calculations of the U.S. census and the insurance industry's actuarial tables.

But lately, the analog builders have gone all out to recapture their share of industry's attention and orders. Their pitch is that analogs can be just as great a boon to industry as the digitals have been. And in scope and capacity, they say, the analogs are just as good.

Electronic Associates, Inc., Long Branch, N. J., leader of the analog pack, recently delivered the biggest, most accurate analog computer yet to Hughes Aircraft Co. The computer will be used for simulating equipment for interceptor fire-controls, and guided missiles. Similar industrial jobs are handled by the units of five other firms in the field: Berkeley Div. of Beckman Instruments, Inc. (page 178), Boeing Airplane Co., Goodyear Aircraft Corp., Philbrick Researches, Inc., and Reeves Instrument Corp. These companies design mostly for industrial uses. Companies such as Arma Corp. and Ford Instrument Div. of Sperry Corp. are old-time analog producers, but they specialize in devices for artillery fire control.

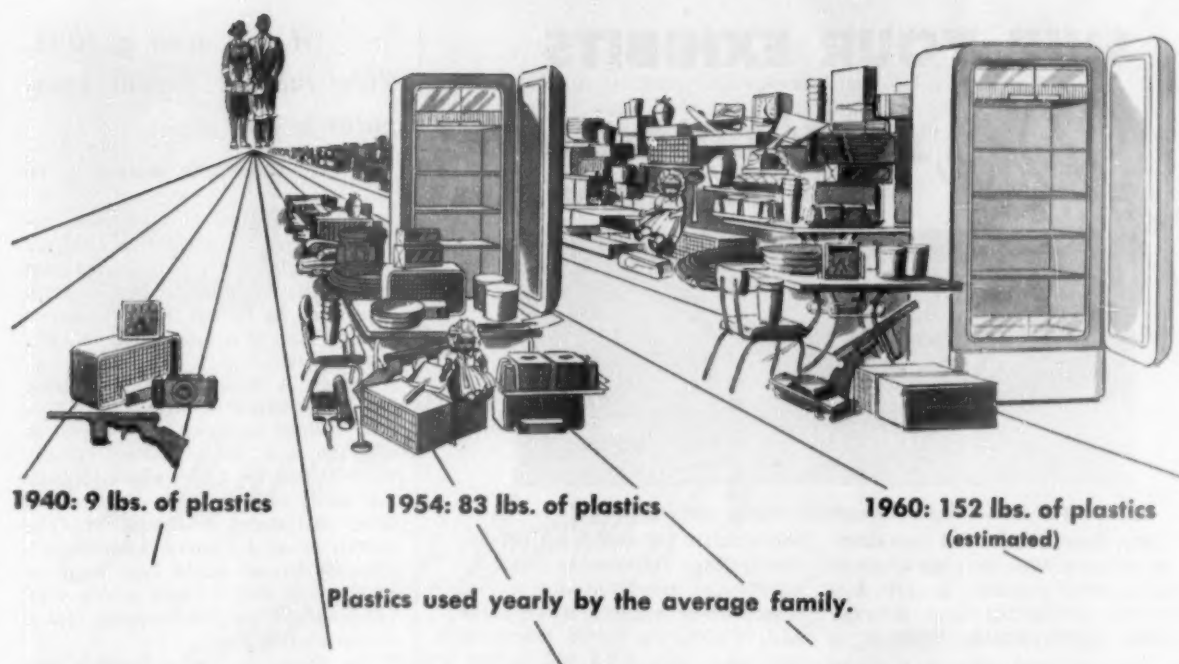
• **Industry**—So far, nearly all of the analog makers' output has gone to companies that are working on defense projects. The uses cover most product research from the ballistics of ordnance gear to the flow of air over a jet fighter plane's wing. But that market will eventually dry up, or at least become very limited.

The big future for analogs is in private industry. There, the analog computers can save countless man-hours and dollars in product testing, and in managing the engineering details of a technical field such as chemical processing. The engineers of Electronics Associates point to three promising applications that show signs of blossoming out:

• **Big utilities** gave analogs a start in industry by using the computers to study the operations of power networks and distribution of power in markets.

• **Processing firms** can work out supply-and-demand figures months in advance. A petroleum producer, for example, can estimate the output of its products and coordinate its needs for tank cars at the shipping point. That way, the company won't have to pay extra money for demurrage of the cars.

• **Atomic reactors** for power plants



## PLASTICS CONSUMPTION SOARS 900% SINCE 1940; TO DOUBLE PRESENT LEVEL BY 1960

*What does this growth mean to your business?*

**More sales power.** The warmth, color, durability and economy of plastics have captured the imagination of American consumers. What further proof of their appeal is needed than the unprecedented growth headlined above?

**More production power.** Dramatic new developments in plastics offer your business or industry design possibilities and production economies hitherto unknown to industry.

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The "Who's Who" of American industry uses the big six of plastics: styrene, phenolics, cellulose, vinyls, aminoplasts and polyethylene. Is *your* business represented here?

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### The ONLY departmentalized display moving service!

North American padded vans shorten delivery time on your displays, dismantling. Nationwide dispatching network assures prompt arrival of vans when promised. Better move service eliminates local drayage. Little or no crating required — ALL WAYS, via North American.

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The first step to clear thinking is ease from tension. This means being completely relaxed. You know how it feels to be so relaxed for sometime, somewhere, you've been seated by Royal.

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175 North Michigan Avenue, Chicago 1, Illinois, Dept. 45  
Your only source for over 150 metal furniture items. Write for literature.

" . . . if you need a 10-ft. slide rule, a digital computer is your dish . . . "

COMPUTER starts on p. 90

are partly designed by computers, before expensive pilot-plant models are built. An analog can uncover the bugs in a design. Or its solution for a certain design can be turned into a blueprint without fear of a hitch later on after construction.

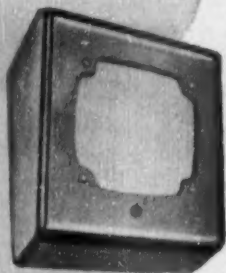
• **Scope**—"A mature computer laboratory," one expert—a digital specialist—says, "should be about 80% digital in capacity, and 20% analog." That's probably true for a firm whose computing needs call for large capacity and heavy investment in equipment. The operations of a General Electric or a Douglas Aircraft might have those requirements. But a single analog computer will fill the bill for many typical manufacturing firms.

For them, the analog builders have a rule of thumb to determine whether a prospective customer should purchase an analog or a digital. If your problem can be solved by the scope and accuracy of an ordinary slide rule, an analog computer will fit your requirements. But if you need a slide rule 10 ft. long, one with more capacity and exactness, a digital computer is certainly your dish of tea.

The dividing line is the number of significant digits used in a problem. An analog will handle an engineering equation that has up to four digits in any one factor. But a bigger number such as a sales statistic or an insurance actuarial statistic needs the help of a digital computer. You can use a digital for a mass of simple problems, or several different complex ones.

Most of today's engineering problems fall into the four-digit class. And that's why, the computer experts say, an engineer feels right at home with an analog. Probably he will use a well-known algebraic equation in testing an automobile spring, a formula whose accuracy needn't go further than four numbers. He could work out the problem manually, if he had enough time. But the inner workings of an analog can do the calculating for him in a matter of seconds.

• **Workings**—Setting up the problem in an analog is similar to the settings you make on a slide rule. A spring might react to many factors such as weight, friction, and tension. For each factor in the problem, you turn one or several controls to the values you want, as you would adjust the knobs on your radio. Each one of the controls, in turn, adjusts a unit that is designed for an individual kind of arithmetic. Electronic



**RCA SOUND** can tie your entire operational and administrative organization into a single, functional unit. Routine communication, paging, and emergency instructions can be handled in seconds with an RCA Sound system. Unitized design adapts an RCA Sound system to any plant requirements. Check on RCA Sound for greater flexibility in your operation.

*"3 low-cost ways to do your legwork without leaving your desk"*

**RCA's NEW TV EYE** takes you into the plant at any hour of the day—shows you a clear, clean close-up of any operation. Small TV Eye camera—no bigger than a 16mm movie camera—allows you to see practically anywhere for continuous, low-cost supervision of any operation. Camera and control unit can be connected to any standard TV receiver. See how TV Eye can offer you more efficiency, more time at your desk every day.

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**RADIO CORPORATION of AMERICA**  
ENGINEERING PRODUCTS  
CAMDEN, N.J.



## Time Out for Talk

PEOPLE TALK about more than the weather. They give full vent to strong likes and dislikes whenever they take time out for talk—and that is quite often. They frankly express their feelings about people they admire, politics they question, companies they prefer to patronize.

People are constantly talking about your company and your product, you may be very sure. It is essential to your prosperity that they like your company and your product. Otherwise they may spread unfavorable reports that could lead others to think unfavorably too.

### How to Make Them Like You

The most dependable way to get people to prefer your company and product is this: tell your story IN PRINT. When a prospect absorbs the facts about your competitive advantages from an attractive, well-printed booklet, brochure, broadside, bulletin, folder, annual report or catalog, he is most likely to retain these facts. Next time the occasion arises, he will speak with persuasion based on fact, not hearsay.

One word of counsel: print your facts in full. Tell your complete story, omitting neither major nor minor selling points. Thus you fortify your prospects with the unassailable truth about your company and your product.

### Your Ally—A Good Printer

Once a printed piece is agreed upon, call in a good printer without delay. Put him on your planning and creative team right from the start. He will then be in the best position to apply his skill and experience every step of the way—and he will save you the most in time, work and money.

To deliver the most effective selling literature to you, your printer will probably select Warren's Standard Printing Papers. For a hundred years the good printers have respected the ability of Warren papers to produce bright, eye-appealing, uniform printed pieces, just the kind you need for today's competitive selling. *S. D. Warren Company, 89 Broad Street, Boston 1, Massachusetts.*

BETTER PAPER — BETTER PRINTING



**"... you don't have to hire a couple of top-flight mathematicians to run an analog computer ..."**

COMPUTER starts on p. 90

units perform addition and subtraction. Potentiometers, similar to a radio's volume control, perform multiplication and division. A still more complicated unit—a combination of mechanics and electronics—solves simple problems of trigonometry.

By themselves, the units are helpless. They must be all hooked up into a kind of network in order to work out an equation. That part of the operation is called programming. You tie the units into a net with the help of a switchboard. When you flick the switch, the whole network goes into operation simultaneously; each of the separate units makes its calculations; and the individual answers come out at a common point, collectively supplying the answer.

The common point is actually a highly mechanized drawing board. On this board, the answer shows up as a line or curve. For specific figures, you simply take readings at various points along the curve. The figures do not have the extremely fine accuracy that can be had from a big digital computer, but they are accurate enough for a host of engineering problems that come up in daily operations.

• **Costs**—The tab for a basic analog computer right now is about \$15,000. That will get you enough computing capacity to handle many of the fundamental problems in product engineering or processing designs. And you can build on the basic unit, expanding it to suit your needs. By contrast, a digital computer will run about \$500,000 to do the same job. And its special talents will be wasted most of the time on small problems.

Personnel is hardly a problem for a company that orders an analog. With a little instruction, the company's own engineers can easily learn how to run the unit. You don't have to hire a couple of top-flight mathematicians to run the computer, as is often the case with the more complex digitals.

There's always the chance, however, that a company will have to make a compromise between its technology and an analog computer. Recently, a weather forecasting service felt that an analog could help its operations and shorten the time in making across-the-country predictions.

The arithmetic of meteorology could be adapted easily to an analog. And the computer would give perfectly accurate answers. But there was a hitch



## *New weapons... against weeds*

Friendly to crops... deadly to weeds — amazing new chemicals  
are good news to our farmers and home gardeners

WEEDS cost America's home gardeners countless backaches — and they cost America's farmers billions of dollars a year in crop losses.

**SCIENCE TO THE RESCUE**—Now scientists have developed chemicals that are death to weeds but harmless to crops. One of these, a chemical weed killer, has already proved effective in protecting more than 50 kinds of plants, shrubs, and food crops.

**HOW DOES IT WORK?** The secret of this remarkable herbicide is that, when sprayed on the soil, it attacks weeds right at the surface. That's where most weed seeds sprout. The deeper-rooted crops are left unharmed.

**OTHER WEAPONS, TOO**—Weed killers are but one

of the chemical tools the people of Union Carbide produce for our farmers and gardeners. Their insecticides, fumigants, and fungicides protect growing and stored crops from insects and fungi. These give the grower added freedom from backaches and the nightmares of crop failure.

**FREE:** Learn more about UCC's chemical aids for the farmer and gardener. Write for Crag Agricultural Chemicals booklet D.

## UNION CARBIDE AND CARBON CORPORATION

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### *UCC's Trade-marked Products include*

Crag Agricultural Chemicals

ELECTROMET Alloys and Metals

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NATIONAL Carbons

PYROFAX Gas

EVEREADY Flashlights and Batteries

UNION Carbide

ACHESON Electrodes

PREST-O-LITE Acetylene

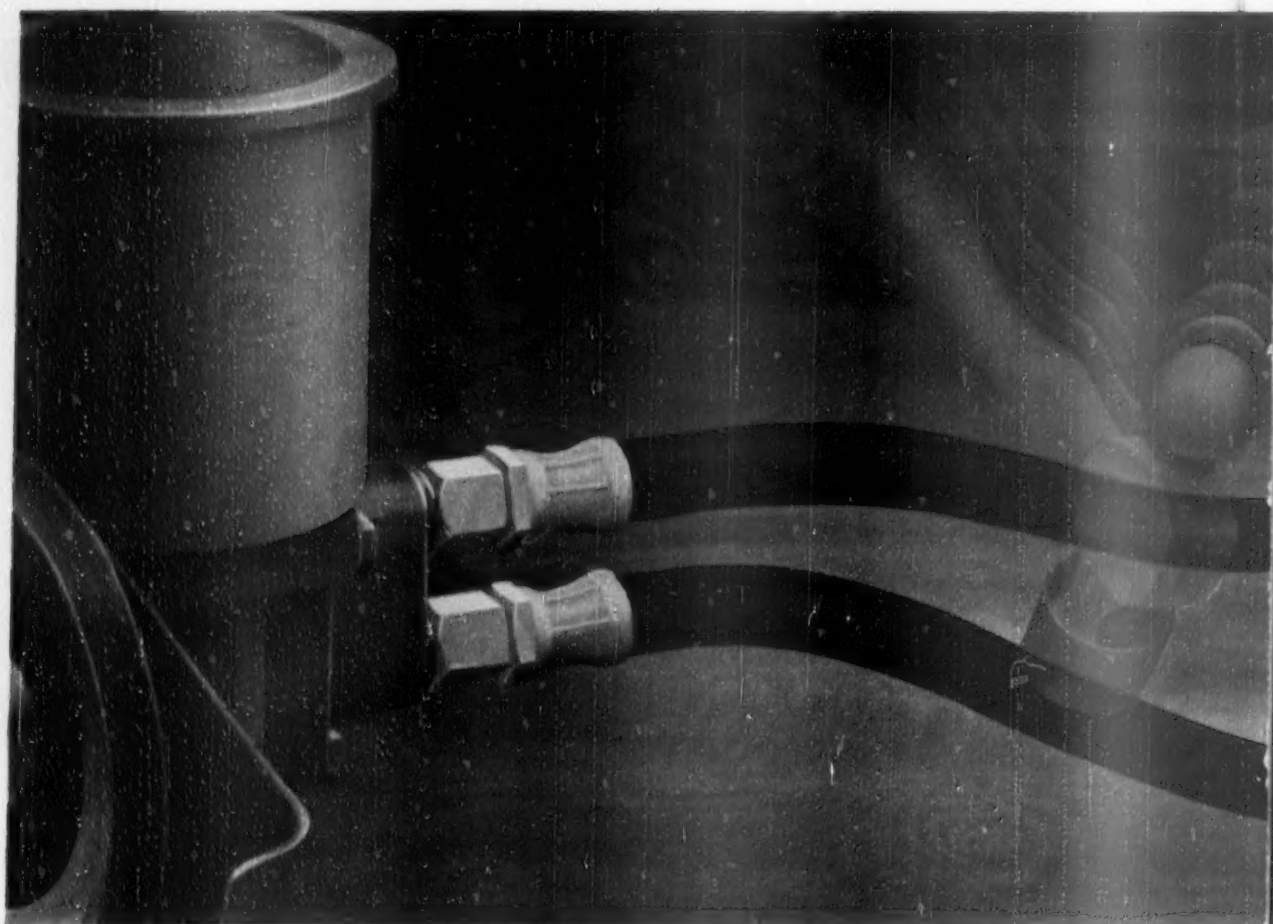
BAKELITE, VINYLITE, and KRENE Plastics

PRESTONE Anti-Freeze

SYNTHETIC ORGANIC CHEMICALS

DYNEL Textile Fibers

LINDE Oxygen



## The hose that "swallow" to make Power S



**YOUR GOODYEAR DISTRIBUTOR** can quickly supply you with Hose, Flat Belts, V-Belts, Packing or Rolls. Look for him in the yellow pages of your Telephone Directory under "Rubber Products" or "Rubber Goods."

Many were the headaches in the development of power steering. Harnessing hundreds of pounds of pressure so that it responded to finger commands was tougher than most people realize. One big problem, for instance, was to eliminate excessive noise and vibration from test cars. Sounds simple, but it almost stumped the engineers.

Like "air hammer" that sometimes occurs in water pipes was the chatter set up when the power assembly went into action. Rapid changes at high pressure in a closed, rigid system were the cause. Steel pressure accumulators were a solution. But these were too high in cost and maintenance.

# GO

THE



**It flows a hammer"**

**Steering possible**

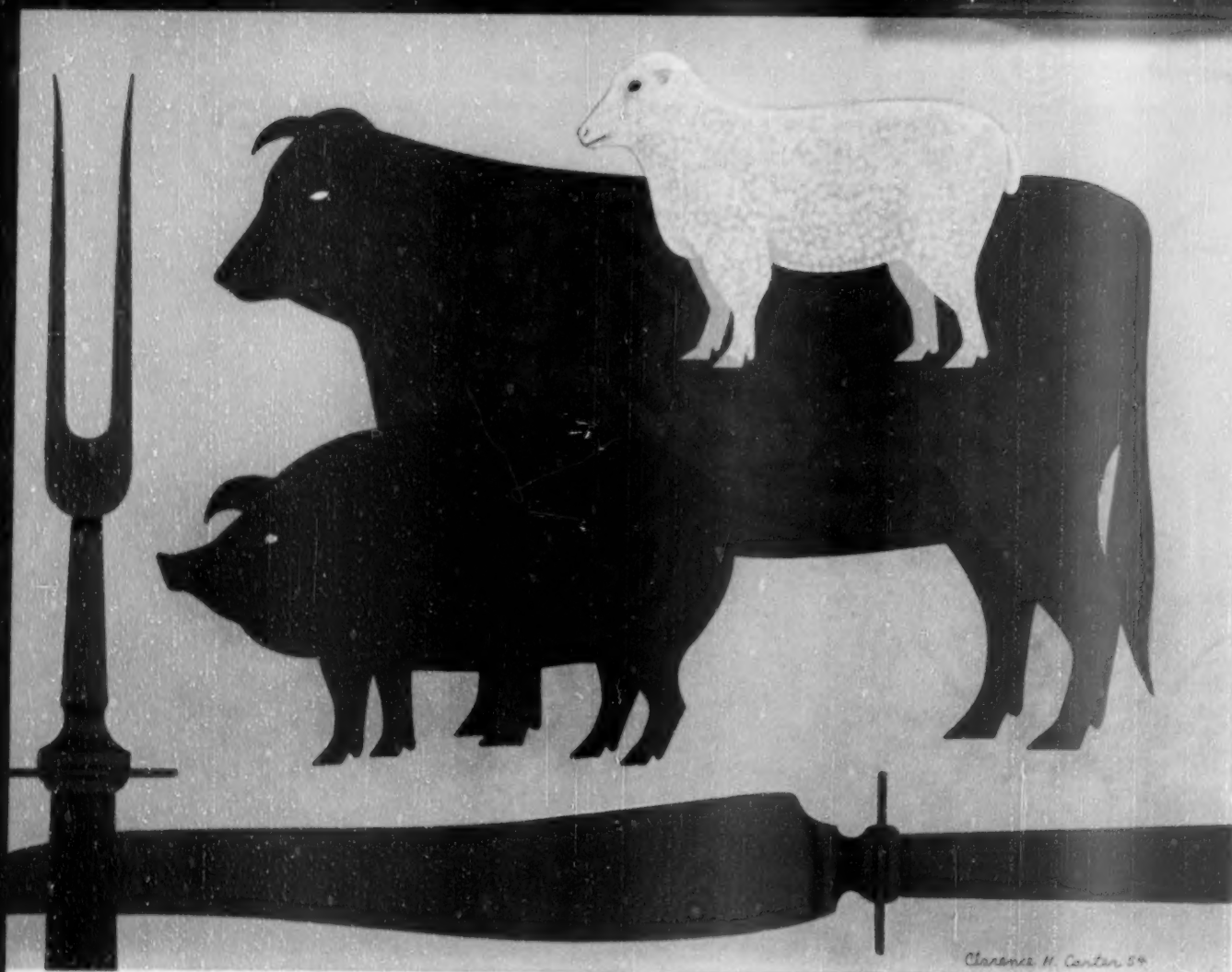
Then, someone thought of hose and how its flexibility often is used to eliminate pounding in air and water lines. They tried common water hose. Over a hundred feet was needed to do the job. Obviously, this was too much to put under an automobile. Shorter lengths of every possible hose were then tried without success. Finally, the G.T.M. —Goodyear Technical Man—was called in.

His answer was a specially constructed hose that withstood the over 600 pounds' pressure of the system; that expanded between certain pressures to absorb the "hammer"; that resisted the oil, grease and hydraulic fluid;

that was unaffected by engine heat and that did all this in a mere 18 inches of length. The result was practical, economical power steering.

The answer for you—on any hose problem—also rests with the G.T.M. Whether you need special hose or one of the more than 300 types now in the line, you can be sure he'll specify the right hose. Just as you can be sure he'll show you how to get the most out of rubber in every imaginable industrial use. Consult the G.T.M. through your Goodyear Distributor or by writing Goodyear, Industrial Products Division, Akron 16, Ohio.

**GOODYEAR**  
GREATEST NAME IN RUBBER



Clarence H. Carter '59

## Meat packing . . . and *The National City Bank of New York*

*The tonnage is incredibly large;  
the profit unbelievably small*

If you're an average American, last year you ate 76 pounds of beef, 64 pounds of pork, 9 pounds of veal, and 5 pounds of lamb and mutton. To supply us all with this annual ration of 154 pounds of meat, the country's 4,000 meat packers processed an average of 68 million pounds of meat every day—25 billion pounds. They slaughtered 35½ million head of cattle and calves, 67 million hogs, and 16 million sheep and lambs.

This tremendous tonnage of meat was 9% more than in 1952. In that year, the packers received more than \$11 billion. But after all their expenses and taxes were

paid, they had left as profit only \$63 million, or 6/10 of 1% of total sales, one of the lowest profit ratios in industry. (Average profit ratio for all manufacturing runs around 5%.)

Taxes and other expenses amounted to \$1,227 million, close to 11%. Wages and salaries accounted for another 11%, and payments to farmers took nearly all that was left, more than 77%.

Many of the meat packers refer to The National City Bank of New York as "their bank." They come to us not alone for financing and other day-to-day banking services, but for counsel and guidance. They have discovered, as you will, too, that the training and experience of our officers, combined with National City's world-wide contacts, make us an

unparalleled source of up-to-the-minute information on all aspects of business.

Overseas, the Bank has 57 fully staffed Branches and correspondent banks in every commercially important city in the free world. In this country, the Bank has correspondents in every state, and 70 Branches in Greater New York. For more about the advantages of making National City "your bank," and of covering the world with one bank account, write:  
The National City Bank of New York  
55 Wall Street, New York, N.Y.

Member Federal Deposit Insurance Corporation

**First in World Wide Banking**

to the answers. They showed up on the chart as numerical values, whereas the forecasting service wanted to stick to its traditional symbols—flags, wheels, and the like. The project fell flat because the symbols couldn't be replaced by the coded numbers that an analog can handle.

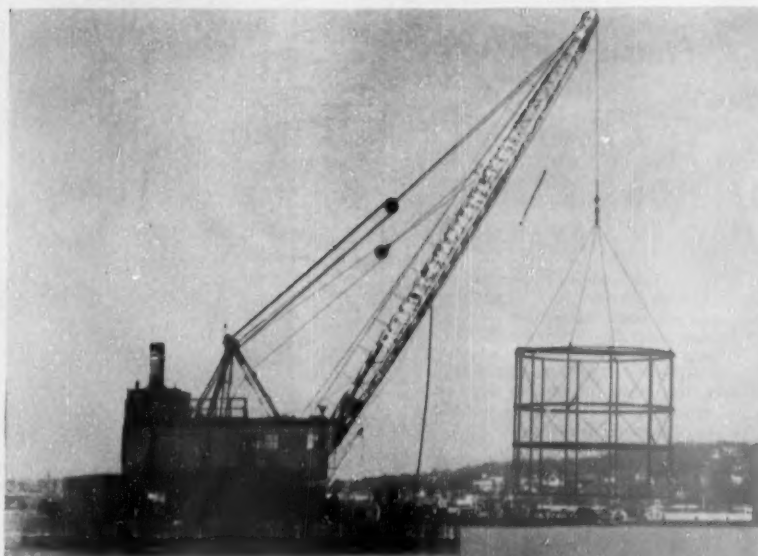
• **Sales**—Right now, the analog manufacturers admit that they are running into sales resistance from nondefense industrial companies. Many companies aren't convinced that replacing their present testing methods with an expensive analog will save them money and man-hours in the long run.

L. F. Christianson, president of Electronic Associates, feels there is only one way to break down resistance like that: The analog industry must sell its ideas on analog applications before it can expect to get the orders for computers. What Christianson means is that an analog maker ought to offer a long-term consulting service, and demonstrate a computer's advantages by working out some problems for possible customers. Given a taste of an analog's advantages, the theory goes, a company will sooner or later push its sales a little higher in order to pay for a new computer.



## Oil for Arctic Clocks

The three airplane clocks (right) are running on a new cold-weather lubricant developed by Elgin National Watch Co. The other three (left), oiled with the best previous lubricants, have stopped in the 65F below zero cold of the test chamber. The new oil, costing more than \$1,000 a gallon, is designed for use in aircraft cameras and navigation instruments. It's expected to eliminate one of the greatest obstacles to successful military operations in the Arctic.



An American Revolver Crane lowers a 35-foot bracing section into place.

The shape of things to come is shown in the outline of the Thruway's footings.

## Highway To Float Across Hudson

Engineers have put the Hudson river to work for them where the New York Thruway takes the long "water jump" between Nyack and Terrytown. Huge water-tight concrete boxes below the river's surface act as pontoons supporting 80% of the bridge's deadload.

The remaining 20% of the deadload, plus all the live load will be carried by piles driven to bedrock. Barge-mounted American Revolver Cranes play a vital role in keeping this unique project "on schedule" for the contractors, Merritt-Chapman & Scott of New York.

On the New York Thruway—and on major projects across the nation—cost-conscious contractors rely on American equipment for efficiency and rugged dependability. Factual, on-the-job stories of many of these projects, showing time and money saving applications of American Hoist products are described in the Crosby Clipper. If your business is such that these stories would be of interest to you, mail the coupon below.



## American Hoist

and DERRICK COMPANY

American Hoist & Derrick Company

St. Paul 1, Minnesota

Yes, I'd like to get the American CROSBY CLIPPER.

Also, send information on the following equipment:

— Hoists — Steel Derricks — Cranes — Portable Elevators  
— Genuine Crosby Wire Rope Clips

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### ASK ANY ARKANSAS PLANT OWNER ABOUT LABOR IN ARKANSAS

You'll find amazing records of harmony, fewer work stoppages and less absenteeism than in any other state . . . lower production costs and raw product advantages too . . . all of which adds up to profit. Want to see a "Who's Who" of the New Industrial Plants in Arkansas?

Write me personally or call me on my private phone FRanklin 2-3428 and let me show you a plant site that you'll want in Arkansas



FRANCIS CHERRY  
Governor

IN THE CENTER OF THE ONLY 500  
MILE RADIUS THAT GIVES YOU  
61 MILLION OF YOUR CUSTOMERS

## Can the Soft Drink Industry use **YOUR PRODUCT?**

Don't say "NO" until you've checked the tremendous variety of equipment, parts, supplies and services needed by the 5600 bottling plants producing America's favorite refreshment—soft drinks.

Many companies have already discovered that the soft drink industry represents a brand new market for products well established in other fields. They never suspected the excellent application for their equipment, supplies or services in bottling plants.

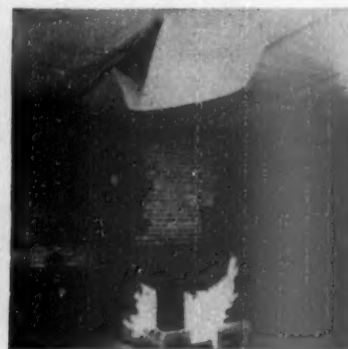
Now, there's a sure way, proved by experience, to find out if YOU have a product for this great potential market. It's the International Soft Drink Industry Exposition—to be held this year in Philadelphia, Convention Hall, November 15-18, 1954, at the same time as the industry's annual convention. Bottlers go to this annual event looking for new ideas. And they go ready to buy.

Can the soft drink industry use your product? The best answer is—put it on display. Or, come to the exposition and see its possibilities. For complimentary admission tickets and complete information on available space write to the industry's national association:

**AMERICAN BOTTLERS OF CARBONATED BEVERAGES**  
1120 Sixteenth St., N.W., Washington 6, D. C.



## Ceiling Shines at Night . . .



Luminous ceiling of vinyl plastic hides a sprinkler system; if fire starts, the heat loosens ceiling strips, which fall out of way, letting sprinklers put out fire.



## . . . Wilts When Fire Starts

One of the brightest night spots at the new Cross County Shopping Center in New York's suburban Westchester is the branch of the First National Bank of Yonkers (top picture, above). What makes it shine out like a beacon to belated shoppers in what has been called the world's largest shopping center—at least on evenings when the bank is offering its financial first aid—is its fancy new luminous ceiling.

The new-type ceiling is not only about the hottest thing in lighting since fluorescents caught the public eye at the New York World's Fair in 1939 and entered the big time. It's also another of the manifold uses for the fast-spawning plastics industry (BW-Apr. 10'54,p100). And as the smaller pictures above indicate, it makes possible the use of the increasingly popular dropped ceilings without blocking off

## Your business is in the Age of Electronics

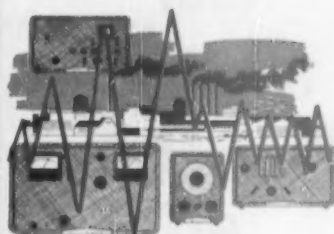


**Electronics at work:** Electronic test instruments in the new Ford Engineering Research Laboratory include Hewlett-Packard oscillators, voltmeters, wave and noise analyzers, signal generators, and the new, amazingly versatile -hp- electronic counters. Noise level measurements (above) are often made outdoors to reduce the influence of reflected sound on instruments.

## At Ford, new electronic test instruments speed research, simplify product testing

A complete electronic test setup makes the new Ford Motor Company Engineering Research Laboratory at Dearborn an engineer's dream. Many engineering problems are solved in a fraction of the time formerly required. The new electronic equipment—much of it supplied by Hewlett-Packard—enables Ford engineers to develop new and improved components, measure speeds, time mechanisms and evaluate stress and strain quickly and with accuracy hitherto unobtainable.

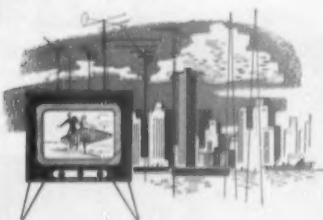
Hewlett-Packard is a pioneer and world leader in electronic test instruments—basic measuring tools used throughout manufacturing and process industries, in scientific research, communications and military installations. Correct application of such equipment is of first importance; Hewlett-Packard field engineers can tell quickly whether any of over 200 different -hp- instruments are applicable to your needs. A letter giving your measuring requirements will receive prompt attention.



Throughout industry, electronic test instruments are making routine measurements faster, making other measurements once not possible. They function by comparing or measuring electrical impulses from natural or man-made sources.



Oil companies use -hp- voltmeters and oscillators daily in geophysical exploration. By evaluating electrical signals reflected from different subterranean strata, instruments help find oil.



Your TV picture is clear and steady, thanks to electronic test instruments. TV set makers use them to design better circuits, and speed manufacturing. Broadcasters use them to maintain transmitters in perfect operating condition.



**ELECTRONIC MEASURING  
INSTRUMENTS**  
for speed and accuracy

FIELD ENGINEERS IN ALL PRINCIPAL AREAS  
**HEWLETT-PACKARD COMPANY**  
DEPT. B, 395 PAGE MILL ROAD • PALO ALTO, CALIFORNIA

# Your Dollar Buys More Air Conditioning with

**TYPHOON**  
AIR CONDITIONING



Engineered with rugged, over-sized components, Typhoon units have power to spare. They always deliver full-rated capacity even under the most gruelling conditions. That means longer life, fewer repairs, more economical operation. Long years after your investment has paid for itself, Typhoon keeps on giving you efficient, trouble-free air conditioning.

Call the Typhoon dealer listed in your classified telephone directory or write us for his name.

TYPHOON AIR CONDITIONING CO., INC.  
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Chuckling hundreds of threaded brass elbows per hour at The Imperial Brass Mfg. Co., Chicago, was rough on fingers before GAUZTEX was employed. One example of countless uses!

## Protection AT HER FINGERTIPS

Self-adhering GAUZTEX bandage is quickly applied, retains the "feel" of the finger, protects completely against sharp edges, burrs and shavings. Can't interfere with work as it adheres only to itself. Workers will use GAUZTEX as there is no sticky pull...allows skin to breathe...gives a natural, sure-fingered grip. Available in economical, industrial rolls through all medical and safety supply houses.

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**GAUZTEX**  
SELF-ADHERING GAUZE

Request sample and literature on your letterhead.



"Will advertising in business magazines 'pay off' for me? Can I reach my markets with business magazines? Do they go to the people I have to sell? Are business magazines really read?"

These are some of the questions asked—and answered—in this 24-page booklet. Result? A basic tool for advertising men concerned with establishing the sales functions which can be delegated, economically, to consistent industrial advertising.

A copy is yours for the asking. Write for the "MECHANIZING YOUR SALES" booklet.

**McGraw-Hill**  
PUBLISHING COMPANY

Room 2710  
330 West 42nd St., New York 36, N. Y.

sprinkler systems that are essential for fire protection.

It's the lighting effect, of course, that makes the immediate impression for the luminous ceiling: the bright, glareless light that results from using lines of fluorescent lamps and diffusing their rays through the dropped ceiling of thin plastic.

• **Behind It**—The driving force behind luminous ceilings is L. J. Segil, an ardent proponent of fluorescent lighting since the 1930s. Segil sizes up his ceiling prospects like this: When you combine into one product two such booming items as fluorescents and plastics, you have the makings of a real snowballing operation.

Segil installed the first luminous ceiling in July 1950 for a friend in Chicago who couldn't find anyone to test an idea he'd heard about at Massachusetts Institute of Technology. Shortly thereafter, the Air Force decided to try out the idea in a new building a Chanute Field, Ill.—and a new company was on its way. Since that time, Segil estimates that his company, Luminous Ceilings, Inc., of Chicago, has installed 3,000 of an estimated 3,500 such ceilings now in existence.

• **Dropped**—The demand for dropped ceilings has been growing in the last decade as industry has become more conscious of noise. Various types of soundproofing material have been suspended below the real ceiling of the room, which is left rough. Often the area between the dropped ceiling and the rough ceiling is used as a passage for warm or cool air circulation. The lowered ceilings have also been used to carry out modern decorative schemes by combining them with modular lighting fixtures.

Luminous ceilings carry this trend one step further, both structurally and decoratively. Thin strips of plastic sheeting are placed on suspended metal carriers. The sheeting is only 0.007-in. thick.

The material is flexible, but corrugations give it sufficient stiffness to bridge a 3-ft. span between carriers.

• **Psychological**—To date, luminous ceilings have been most popular in remodeled offices. There's a prestige value involved in having the most up-to-date kind of lighting to impress and perhaps influence visitors. In supermarkets and specialty shops, where the new ceilings are now getting a big play, the diffused lighting cuts down the chances of having merchandise look off color.

Segil reports that the psychological effects of the new lighting are tremendous. From his early fluorescent lighting days, he recalls a survey that showed an average increase in sales of 26% following proper relighting.

• **Selling Points**—The Yonkers bank

# For the Record

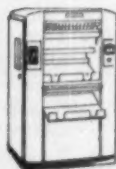


Frederick C. Miller, President, Miller Brewing Company

In its drive to attain greater efficiency, the Miller Brewing Company has installed a Bruning Copyflex system for handling its records. Copyflex systems are the new, modern method of speeding paper work in plant and office.

In recent years thousands of industrial and business concerns all over the country have found that efficiency in production and merchandising cannot be obtained without corresponding efficiency in the handling of paper work.

In any business or plant operation where multiple copies of a record are required, Bruning Copyflex will save man-hours and eliminate errors. It applies to office procedures and plant management the accepted principle of replacing expensive—and possibly inefficient—hand labor with a machine.



Copies anything typed, written, printed or drawn on ordinary translucent paper—in seconds.

## BRUNING

## Copyflex

From an Article by  
Frederick C. Miller

President  
Miller Brewing Company  
Milwaukee

Sports are second only to religion as an integral part of our American way of life.

Our love of sports—and good clean sportsmanship—is vital in our effort to keep Communism from our doors and to influence good neighborliness throughout the world.

Because of our personal love of sports and what we feel they stand for, the Miller Brewing Co. makes sports an integral part of its promotional effort throughout our home city, Milwaukee, our home state, Wisconsin, and our great country, the United States.

We are proud and happy to encourage many grand American sports, especially baseball, football, trap and skeet shoots, and skiing. We have many times backed basketball, bowling, golf, tennis, soccer, archery, ice skating, and hockey.

Our professional football radio broadcasts and telecasts have been enjoyed by millions throughout the nation and in August we will broadcast and telecast nationally the famed All-Star football game from Soldier Field in Chicago.

In our "back yard", we broadcast over many Wisconsin, Minnesota, Iowa, and Michigan radio stations the games played by the Milwaukee Braves.

We feel our tie with sports is a great privilege. We pledge always to keep this tie on the highest level for the good of sports and our nation.

• • • • •

**NOTE:** Fred Miller, author of the above article, is a former All-American tackle at Notre Dame. He has been featured in many national magazines for his promotion of athletics.

CHARLES BRUNING COMPANY, INC., 4700 MONTROSE AVENUE, CHICAGO 41, ILLINOIS

## Business pressure...blood pressure

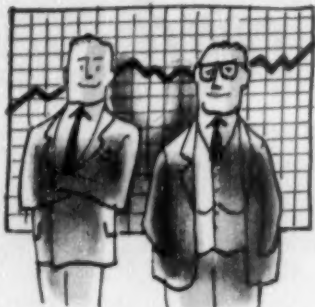
The president of a "close" corporation recently decided that the firm should take out a \$50,000 life insurance policy on each of its two top key men.

"When these men are examined," the president insisted to the agent, "I want a thorough job done and a personal report made to me. These executives have been working under heavy pressure for some time, and the road ahead is not going to be any easier."

The doctor found that one man's blood pressure was much too high. The other was found to have rapid pulse, heart palpitations and a nervous digestive disturbance. Neither was insurable on a standard basis.

The corporation president was right in his concern for the health of his key men. He was right in wanting to protect the business against the loss of these men. But, on both counts, he was too late. He had waited too long.

How many other executives under pressure should get their life insurance NOW?



New England Mutual is one of the nation's leading companies in adapting life insurance to meet the specialized needs of business. Why not consult with a New England Mutual underwriter NOW? He will be glad to work with you, your attorney and bank trust officer in setting up the correct plan for your business.

# The NEW ENGLAND

# MUTUAL



Life Insurance  
Company of Boston

THE COMPANY THAT FOUNDED MUTUAL LIFE INSURANCE IN AMERICA—1835

illustrates the main selling points of the new lighting system:

- It offers glareless, shadowless light that's easy on the eyes. Looking at the ceiling you can't see any bright spots indicating a light source.

- It hides electrical conduits, air conditioning ducts, any rough construction. The builders don't have to go to the expense of covering up these things, yet they're still accessible for repairs.

- Sounds are muffled. White asbestos spray was applied to the rough ceiling above the plastic to absorb noise of business in the bank. In noisier installations such as a telephone exchange, hollow fins made of perforated enameled steel and containing a sound absorbing pad are hung at intervals below the ceiling.

- Fire and Water—As with any new product, there have been selling problems, but with luminous ceilings, it has been possible to turn some apparent disadvantages into sales assets, according to Segil. He points to his success in getting around the objection that dropped ceilings block the sprinkler system required for fire protection (pictures, page 100). The only previous way to avoid this was to drop the sprinklers below the dropped ceiling—adding an extra expense.

It's the use of vinyl plastic in luminous ceilings that does the trick. The plastic softens and loses its corrugations at dangerous temperatures. When the corrugations go, the plastic slides off its supports and out of the way of the sprinklers. In underwriters' tests, the plastic fell out of the way at 145F, did not delay the sprinkler's popping off at 165F. The material does not support combustion.

Another problem with dropped ceilings is maintenance. With the plastic, you merely roll up the sheeting, wash it in a mild detergent solution. It can be rehung to dry.

- Future—The future looks rosy. One builder predicts that luminous ceilings will follow the pattern set by venetian blinds. Now that the ceilings have become established in commercial buildings, you can expect to see them turning up in kitchens, powder rooms, and foyers. Eventually, residential uses may furnish the biggest market.

That day is still quite a way off. The material is not yet in the do-it-yourself category, though the installation process is continually being simplified. There's also a sales angle. Since salesmen still have a wide-open industrial market and since it can take as long to sell a single housewife as a big commercial account, you can expect the most activity for the next few years in industry. The cost, about \$1.50 per sq. ft., is competitive with conventional lighting fixtures and shades.

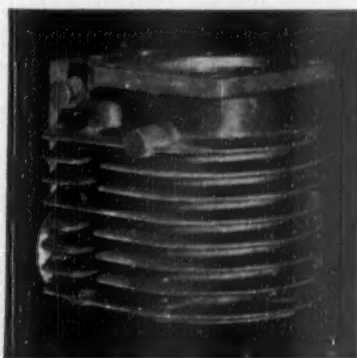


**THE SPARKLE TELLS YOU YOU'RE SAFE** on this sidewalk—wet or dry. CARBORUNDUM® Silicon Carbide Sidewalk Grain in the top coating of concrete walks, floors, ramps and entrances makes them slip-proof...adds years of life to the surface. Where non-reflective skid-proofing is required, and where

extra-heavy traffic calls for maximum wear-resistance, leading architects, builders and contractors use ALOXITE® Aluminum Oxide Sidewalk Grain. Both products make full use of the abrasion-resistant characteristics of CARBORUNDUM's "man-made minerals."

Made by the Bonded Products and Grain Division

## Where's the limit to what you can do with **CARBORUNDUM's "man-made minerals"?**



**COMPLICATED CASTINGS** like this are now commonly made of low-cost gray iron. To avoid excessive misruns and eliminate costly machining, the molten iron must be fluid at casting temperatures to flow evenly into the thin sections of the mold. FERROCARBO®, a special formulation of one of CARBORUNDUM's "man-made minerals"—added to the charge in the foundry—keeps the iron at maximum fluidity while pouring. Result: premium castings, strong and sound—time after time.

Made by the Bonded Products and Grain Division

**HEARING AIDS** have grown continuously smaller and lighter, yet vastly more powerful. GLOBAR® Ceramic Resistors are used in them because the unique electrical properties of silicon carbide produce the desired performance characteristics—in resistors measuring only a quarter of an inch in length, a sixteenth in diameter.

Manufactured by the GLOBAR Division



**SEND FOR OUR NEW 28-PAGE BOOK,** "Man-Made Minerals by CARBORUNDUM." It describes how imaginative thinking—yours and ours—can put "man-made minerals" to work for you. Write for it on your business letterhead. No obligation, of course.

Write to **CARBORUNDUM** for help on  
REGISTERED TRADE MARK  
your problems that "man-made minerals" may solve

—THE CARBORUNDUM COMPANY, Room 146, NIAGARA FALLS, N. Y.—

*Manufacturers of Refractories • Heating Elements • Resistors • Metal Additives • Grinding Wheels • Coated Abrasives • Sharpening Stones • Abrasive Grains*

80-48



## Gaylord Boxes Insure Happy Landings for Your Products

What happens to your products when they "hit the road"? Are they treated as carefully as you treat them back home? Undoubtedly NOT! They're bounced... thrown... jostled... bumped. Not purposely, of course—but it does happen.

For minimum damage, many leading manufacturers are careful to specify Gaylord Boxes. This is a natural compliment to high quality, superior materials, and special protective abilities.

Make a wise investment in cost-cutting product protection. Contact your nearby Gaylord Sales Office.

### Gaylord Container Corporation

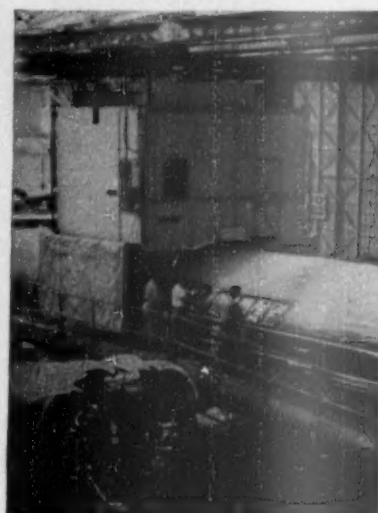
GENERAL OFFICES  
SAINT LOUIS, MO.



SALES OFFICES  
COAST-TO-COAST

CORRUGATED AND SOLID FIBRE BOXES • FOLDING CARTONS • KRAFT BAGS AND SACKS • KRAFT PAPER AND SPECIALTIES

## PRODUCTION BRIEFS



The paint booth above has cut five days off the production time of the Lockheed Super Constellation. The booth travels by crane along the fuselage, can be moved from plane to plane as production progresses. Painters work inside, can spray while regular assembly work continues. Lockheed formerly had to move each plane to another building for painting.

Guided missile research and development is costing the government \$300-million a year and missile production another \$700-million, according to the Aircraft Industries Assn. of America. This probably represents a peak in research expenditures; the \$300-million figure is not likely to increase much from now on. Production, on the other hand, is still climbing. During the last two years, average expenditure for guided missile production has been about \$500-million per year.

**Titanium notes:** A Canadian company, Shawinigan Water & Power Co., Shawinigan Falls, Quebec, says it has developed an electrolytic process that yields a high-grade metal for substantially less than the \$5-per-lb. tag it now carries. . . . The Titanium Metal Corp. of America, New York, says that rotor blades of titanium are now saving 68 lb. in the weight of helicopters.

Shortwave radio-telephone sets have been installed on fork-lift trucks at Chrysler Corp.'s new plant at Indianapolis. A dispatcher at a central office transmits assignments to drivers within the 20-acre plant. Normally, a truck would make 80 trips per shift; with radio, Chrysler says it's able to get up to 110 trips out of each shift.

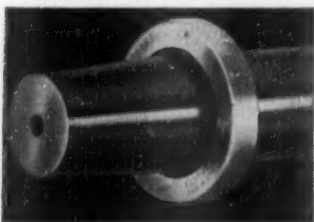
# FARMING



**Versatile** Minneapolis-Moline Uni-Tractor becomes a self-propelled harvester, picker, husker, forage chopper or windrower. National seals are used extensively to protect engine, transmission and wheel assemblies.



**Farmall Cub**, International Harvester's popular light weight tractor, runs smoother, needs less servicing because of extensive use of National Oil Seals. In addition to many farm uses, tractor also doubles as power lawn mower.

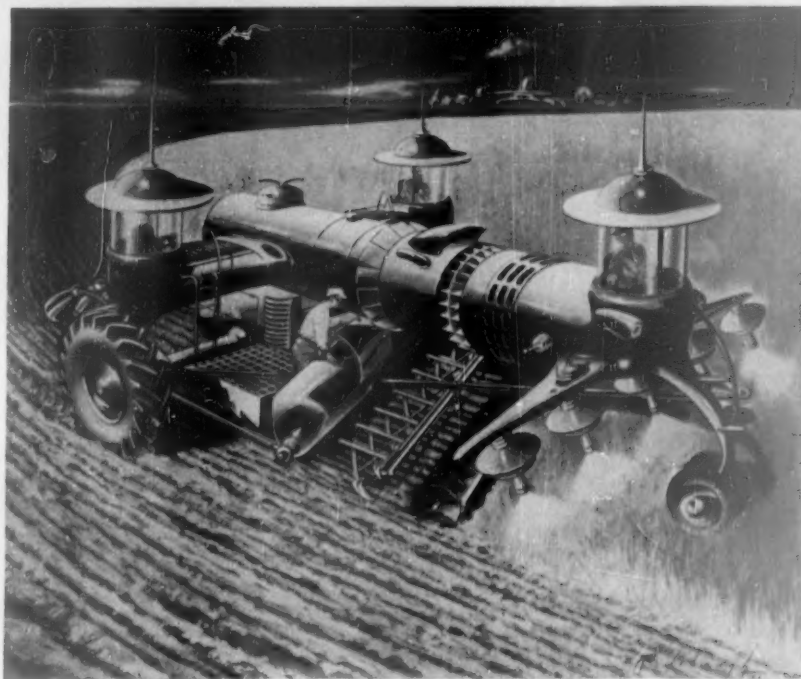


**Oil seals "seal"** with a steel-encased leather or synthetic rubber sealing member that fits accurately around shaft; keeps oil or grease in, dirt and water out. Fit must be perfect.

## AUTO SERVICING



**Automobile wheels** run on ball and roller bearings too, with grease seals to retain lubricant, exclude dirt and water. For motoring safety and longer bearing life, auto makers recommend repacking front wheels with fresh grease regularly and before your vacation trip; installing new seals to keep grease clean and where it belongs.



## Future implements: "everything but think"

Imagine a single machine that breaks and conditions the soil, furrows, plants, fertilizes, even applies a long-lasting insecticide. This is "once over tillage," perhaps soon a reality as farm machinery becomes still more able, versatile and automatic.

Implement designers are hard at work to make farming simpler, less time-consuming and more productive. And in addition to better performance and more varied capabilities, new implements have more dependability and longer service life. One reason for this is the increased use of oil seals to protect bearings and assemblies. Implement designers are thoroughly familiar with the job oil seals do—keeping lubricants and fluids in place, dirt and water out.

Over three decades ago National pioneered oil seals. Since then we've made millions of seals for farm implements, earth-moving and railway equipment, machinery and appliances—plus hundreds of millions for America's motor vehicle fleet. Today we can offer you over 2,500 different standard-design oil seals, or can manufacture special seals for special problems.

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COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY, STATE \_\_\_\_\_

## NEW PRODUCTS



ELECTRONIC TYPEWRITER can turn out 1,800 characters a second—which is . . .

## Faster Than 300 Secretaries

Shepard Laboratories, a New Jersey company, has developed a typewriter that can cope with the output of an electronic computer. It is fed by punch cards or tape.

F. H. Shepard, Jr., above, is looking over a piece of copy that has just been produced by a new electronic typewriter. The machine filled the page with 120 columns of figures in about 10 seconds. Shepard believes that it's the world's fastest typewriter. He says that it can turn out 1,800 characters per second—which is about 300 times faster than your secretary types on a busy day.

The new typewriter was developed by the Shepard Laboratories, Summit, N. J. (Shepard is head man.) The machine has two purposes:

- To cope with the output of fast-thinking electronic computers.
- To speed up the handling of routine work in a company's accounting office.

• **Applications**—It might go about its first purpose like this: The payroll department of a big company could link up the typewriter with its computer. Into the computer will be fed the gross income of each employee. The computer will figure out how much should be deducted for social security, how

much for tax on income. Then it will send this information—plus the employee's net income for the pay period—to the typewriter, which will make out a withholding statement and a payroll check.

The second application might come up in a large department store, where each of 100 cash registers has been set up to record all transactions on punch cards. At the end of each business day, the cards would be collected, sent through a computer to add up the day's sales. Then the computer would store information, customer by customer, in a memory unit. On the 25th of the month, the computer would be told to tally up all charge accounts. This information would be sent to the typewriter, which would run off itemized bills for each account—and do it in a fraction of the time that would be taken by a staff of office clerks.

Either of these chores would be child's play to the new typewriter. Neither would take more than a few minutes of its time. The typewriter is built to take just about any fact that



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When you have corrosion or water treatment problems, look, as the leaders do, to Dearborn for the right answer. Why? Since 1887 Dearborn has kept pace with industry's needs... through laboratory research—in the field service techniques.

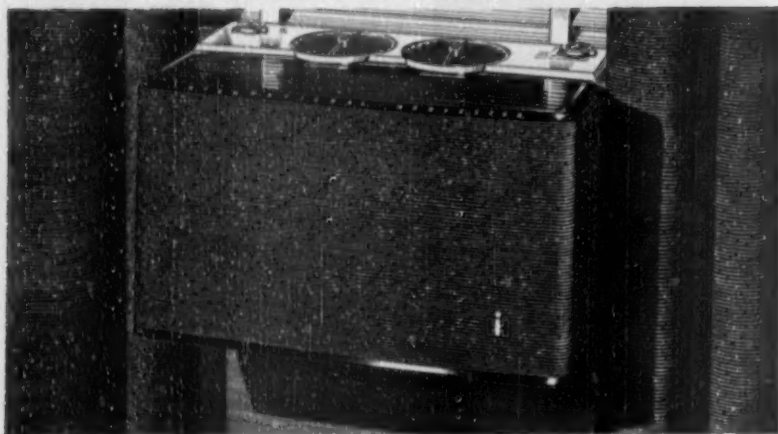


Your Dearborn engineer can help you

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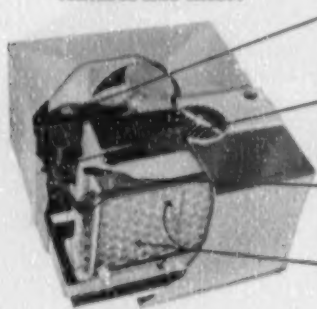
# Now you can cool more air for less

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Now you can cool your room quickly—and keep it cool always—with this smart new IH room air conditioner. No chills. No drafts. No stifling humidity. And all this comfort at lowest possible cost, with IH features like these:



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**Giant Air Mixing Chamber** saves money by spreading more air over more cooling surface.

The ideal air conditioner for office or home because it's quieter . . . and economical. Because it's automatic . . . and trouble-free. Because it's smart and unobtrusive. Your nearby IH dealer has 5 models— $\frac{1}{4}$  to 1 hp.



The air conditioner you can decorate  
to harmonize with your room—



## International Harvester

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"... the price might range from \$50,000 to nearly triple that ..."

TYPEWRITERS starts on p. 108

the computer figures out, and record that information on paper. Shepard's machine won't record the information so fast as the computer is able to give it, for the largest of today's computers might work 100 times faster. But Shepard figures that it is fast enough to make any computer user dissatisfied with standard typewriters.

• **Progress**—Four machines have been built so far. The first two are at U. S. military installations. One is being used by the Navy to handle inventory control information; the other is in use at the Aberdeen Proving Grounds, in Maryland, to record data on ballistics studies. Shepard won't say where the other two machines are in use, but it is a good guess that both are in the hands of computer developers who are working out the engineering details that will integrate typewriter and computer.

Shepard says that step won't require too much work, because the machine is set up now to operate from punch cards and magnetic or perforated tape. Most computers feed out information in one of these three forms anyway.

The machine will become slightly more complex if the computer it's to work with is an especially brainy piece of equipment. Take the machine shown in the picture. It is large enough to handle the information that most large digital computers turn out. But a more complex computer might be capable of turning out twice as much information in a given period of time. A larger typewriter would be required to handle it. For this reason, Shepard isn't able to say just how much one of his machines will cost. The price might range from \$50,000 to nearly triple that.

• **How It Works**—To operate as fast as it does, the Shepard machine has had to abandon the conventional typewriter concept: one key for each character, one character touching the paper at a time. Shepard's typewriter mass-produces its marks on the paper.

The basis of it is a long shaft, parallel to the paper roller and rotating at a constant speed—1,200 times a minute. On this shaft are mounted metal rings. Each ring has a complete set of characters on its rim. The rings are mounted so that like characters line up; all the a's are in a row along the length of the shaft; all the b's are in a row, and so on. If the machine is intended to type 120 characters to the line, there are 120 rings.

As the tape comes through the typewriter, a decoding device analyzes the



Revolver bullet fired from thirty feet by an expert police marksman doesn't flake the zinc coating from the edges of the bullet hole in Armco ZINCGRIP.

## Bullet test shows why it pays to specify this special Armco Steel

Rust hasn't a chance with this special Armco Steel. There's no place for it to start.

Called Armco ZINCGRIP, its special hot-dipped zinc coating stretches with the steel. When you form it into products like storm window sash and clothes dryer drums, there's no cracking or peeling of the coating, as with ordinary galvanized steel.

Mail the coupon today for more information on Armco ZINCGRIP. See how it can cut manufacturing costs and make more satisfied customers by giving your product rust protection.



**SAME TEST, DIFFERENT STEELS.** See how the special coating on Armco ZINCGRIP (left) stayed intact when pierced by a .38 cal. bullet. This means rust protection. In the same test, the coating on ordinary galvanized steel (right) flaked badly, leaving a wide area where rust can start.

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first line to be typed. It finds out how many a's there are in the line, and where they fall. Then, as the row of a's spins by, little hammers push small areas of the paper against the appropriate a's. The same thing happens with the other letters, digits, and punctuation marks. It all takes place so fast that an entire line is typed in 1/15 of a second.

The key to the machine's operation is split-second timing. To operate at maximum efficiency, the long shaft on which the rings are mounted must turn at exactly the right speed. Shepard uses a special rubber belt, developed by New York Belting & Packing Co., to control that rate.

Shepard has had the machine in development for more than four years. The company expects to have models ready for this fall's Institute of Radio Engineers show in New York.

### NEW PRODUCT BRIEFS

**Warning to lockpickers:** Master Lock Co., Milwaukee, Wis., is building fake noises into its new combination locks; they sound and feel like tumbler clicks. If you use the "feeler" system, those noises will get you nowhere.

**An electron microscope,** said to be twice as powerful as any in use today, was displayed last week at the United Nations, New York, by the Radio Corp. of America. It will permit study of particles smaller than one 10-millionth of an inch in diameter. The microscope will be used by the Karolinska Institute of Stockholm, Sweden.

**A high fidelity tape recorder** that weighs less than half as much as the company's earlier models (26 lb. vs. 80 lb.), retails at about half (\$545 vs. \$1,175), was announced this week by the Ampex Corp., Redwood City, Calif. The company says that the machine reproduces the entire audible frequency range: 30 to 15,000 cycles per sec.

**A freezer tray** that produces finely chipped ice at a twist of the wrist is being manufactured by the Gits Molding Corp., 4600 W. Huron St., Chicago. It is made of a du Pont polyethylene resin, looks like an ordinary ice cube tray. Instead of the usual cube compartments, it has many unconnected separator strips. When you twist, the ice breaks into tiny particles.

**A cash register** that shows at a glance whether business is fast or slow in a department has been announced by National Cash Register Co., Dayton, Ohio.

# RYAN builds ROCKET MOTORS for 3000 mile-per-hour missiles

**I**MAGINE a motor powerful enough to propel a missile at speeds exceeding 3000 mph...so powerful that its developed thrust can amount to tens of thousands of pounds. One of Ryan's most challenging current assignments is the complete production of such a motor for an Army Ordnance surface-to-surface missile.

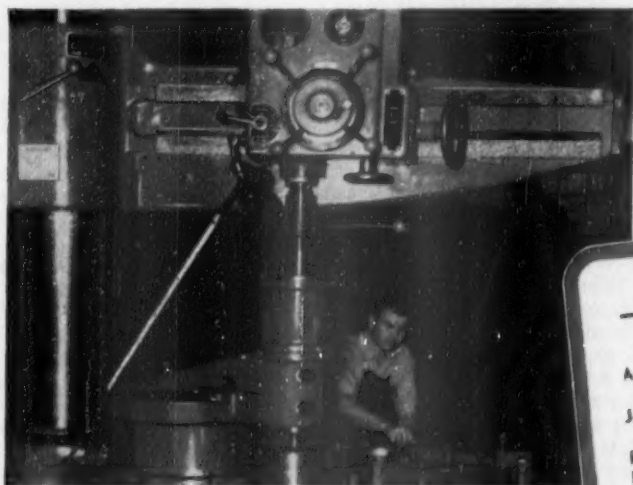
There was a many-sided problem of fabrication, welding and machining that Ryan had to solve in connection with rocket motor manufacture. Because a rocket motor is capable of burning as much as a ton of fuel a minute at temperatures up to 5000 degrees F., terrific internal pressures are created that must be contained in a very compact package of complex construction and exacting dimensions.

The solution was found in perfecting new techniques for forming, welding and machining the special

alloy materials. Ryan devised new methods of controlling work to very close tolerances; ingenious electric resistance and arc welding processes and a better furnace brazing system...plus intricate machine operations that had to be jewel-like in precision.

Ryan's proved ability in the production of complete rocket motors is due in large measure to its long experience in building the "hot end" of jet and piston engines. Its versatility in many specialized fields is an important advantage in each new assignment, for it enables every division to draw on 31 years of firsthand experience in the most advanced phases of aviation engineering and production.

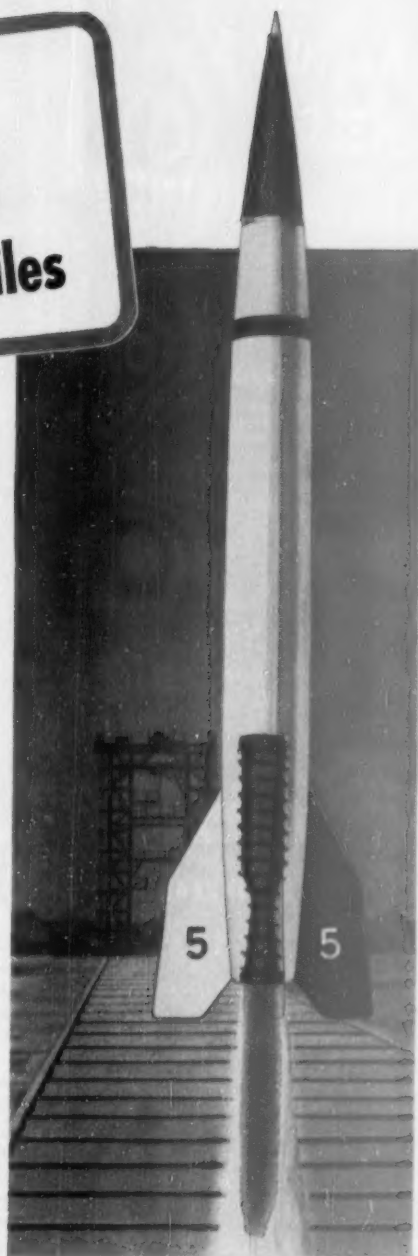
Thus, each year more unique technical engineering and production projects are awarded Ryan...an integrated company with superior abilities in meeting the challenges of today's high-speed air age.



## RYAN AERONAUTICAL COMPANY

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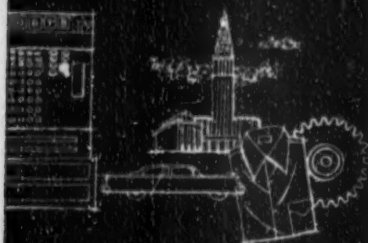
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## FINANCE

**In the Ninth Federal  
Reserve District...**



## Group Banking: Twin

The Ninth Federal Reserve District, based on Minneapolis, is geographically vast but sparsely populated and financially puny. The density of population is far below the national average of 51 persons to the square mile; economically, this populace is far from the richest. By every financial measure, the Ninth is the smallest of the 12 Federal Reserve Districts.

At the same time, the Ninth has a high growth potential, and there is a new stirring of economic expansion in the district: Montana, North and South Dakota, Minnesota, northwestern Wisconsin, and the upper peninsula of Michigan.

Out in the Williston basin of Montana and the Dakotas (BW—Jun. 14 '52, p86), oil companies are pouring an estimated \$100-million a year into developing new petroleum fields. On the iron ranges of northern Minnesota and Michigan, industry is launching what may amount to a \$1-billion program to produce iron ore concentrate from taconite (BW—Nov. 11 '50, p76).

• **The Banker's Role**—All this expansion and its secondary effects will take financing on a large scale. This fact calls attention to another distinction

of the Ninth Federal Reserve District: More than in any other district, its banking is concentrated in a group banking system.

Between them, Northwest Bancorporation (Banco) and First Bank Stock Corp. control 12% of the district's banks. These are the bigger banks. They hold 44% of the district's deposits.

This concentration of bank control arose out of the agricultural depression of the 1920s, when small, inexpertly managed banks were failing right and left. Between 1920 and 1929, there were 1,517 bank failures; the district's roster of banks shrank from 3,551 to 2,353. Minneapolis and St. Paul banks set up the group banking system to bring strength and skilled management to the country banks.

Now the question comes up: Can the group banking system adapt itself fast enough to the economic problems and opportunities that may lie ahead?

### I. Weathering a Crash

The calmest answer to this question is the way the group banking system rode out the Depression, a situation

## ... 44% of Bank Deposits Are Held by Members of These Two Bank-Holding Groups

### Northwest Bancorporation

### First Bank Stock Corp.

#### Their Size Physically

No. of Banks	71	75
Branches	22	6

#### Their Size Financially (In Millions of Dollars)

Cash and Governments	\$908	\$778
Loans and Discounts	553	506
Other Investments	110	81
Total Resources	1,596	1,384
Deposits	1,463	1,265
Capital Funds	93	92
Gross Earnings	47.4	44.1
Net Income	7.5	7.6

Date: 1953 year-end consolidated statement of company and affiliates with interbank balances eliminated.

12 BUSINESS WEEK

## when PROFIT hangs in the BALANCE...



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Produce more . . . handle more . . . at lower cost . . . with an efficient conveyor system that meets your exact needs. BUSCHMAN builds quality conveyors of all types . . . portable wheel and roller, live roller, horizontal powered-belt, overhead and table-cable, floor-to-floor, apron and slat as well as special conveyors.

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## Cities Answer a Need

that required strength and flexibility.

• **Banco**—During 1928, officers of Northwestern National Bank of Minneapolis worried about the shakiness of the country banks and about the loss of business to eastern banks. The solution, they decided, lay in extending the Twin Cities' ownership and control of banks in outlying parts of the district. Branch banking was prohibited by state laws, so group banking was chosen as the means of control.

On Jan. 8, 1929, Northwestern National gave birth to Northwest Bancorporation. Among the charter affiliates were important banks in Fargo, N. D., and Mason City, Iowa (Banco now has four banks in Iowa and five in Nebraska besides its Ninth District banks). The group grew fast—by the end of 1929, it had 90 banks.

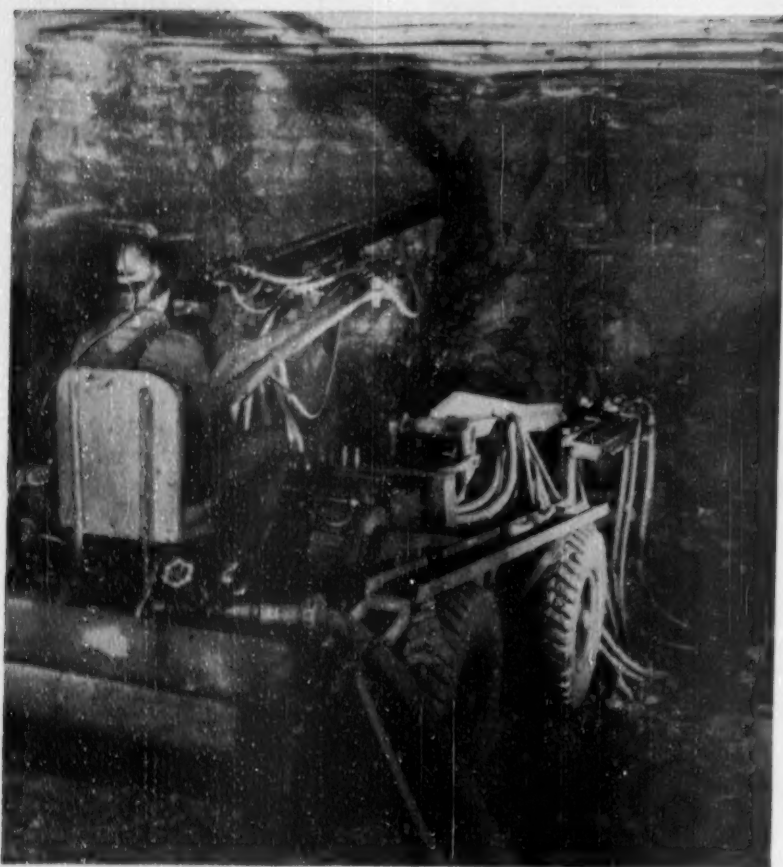
Group banking is based on ownership of most of the local bank stock by a holding company, but on management by local boards of directors. The parent company provides centralized services and—more important—financial strength of its own to help members over the bumps. To raise capital of its own, Banco thus sold stock to the public three times in 1929.

The first two sales brought in nearly \$11-million in cash; the third happened to coincide with the stock market crash, and the underwriters had to make good for about \$10-million.

• **First Bank Stock Corp.**—Meanwhile, other banks in the Twin Cities were watching Banco and Northwestern National with a competitive eye.

The two largest banks in St. Paul—one of them already being serenaded by Banco—merged under the name of First National Bank, and under a management opposed to Banco's expansion. In Minneapolis, Northwestern's chief rival, the First National, was losing the business of correspondent banks that were joining the new holding company.

The pair of First Nationals compared notes, found the same thing was on both their minds, and on Apr. 1, 1929, organized the First Bank Stock Investment Co. as a jointly owned subsidiary. With \$2-million in cash, the company set out to buy country banks, acquired 17 in five months. By then, the cash was mostly used up; anyway, the promoters found many bankers preferred to sell for stock rather than cash. So, in August 1929, the investment company changed itself to a holding



## Easy Chair Drilling

Underground drilling of rock and ore used to be a back-breaking job. Rock drills had to be manhandled!

Now, one man can move right in and drill several dozen holes without leaving his seat on the Gardner-Denver Mobiljumbo. This self-propelled rig puts all drilling functions under finger-tip control. It's another quality product of Gardner-Denver engineering. Gardner-Denver Company, Quincy, Illinois.

SINCE 1859

# GARDNER-DENVER

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FOR CONSTRUCTION, MINING, PETROLEUM AND GENERAL INDUSTRY

company and its name to the present First Bank Stock Corp.

By the end of 1929, First Bank Stock Corp. owned most of the stock of 69 banks, including the First Nationals of Minneapolis and St. Paul, and had sold \$9.5-million worth of stock to the public.

• **Rough Going**—Even though the farm depression before 1929 had shaken out 1,517 banks in the district, country banks were continuing to go under—648 of them in 1929 to 1932. It seemed like a poor time to expand the banking groups, yet actually the smaller banks flocked to get under the wing of the Twin Cities banks. By the end of 1931, Banco had 127 members, which dipped in 1933 to 123 banks and three branches; at the end of 1931, First Bank had 105 members, which dropped in 1933 to 96 banks and three branches.

The strength-through-union concept of the group banks was tested early and often in the Great Depression. Both groups had to pour more and more money into keeping the affiliates solvent. In a few bank runs, they took spectacular steps.

In one case, Banco hired a plane to fly money to a Grantsburg (Wis.) bank where a run started; the money arrived barely an hour after the first rush of withdrawals, and confidence was quickly restored.

In another run, a First Bank affiliate in Missoula, Mont., lost \$600,000 of deposits in three days. First Bank made a deposit with the Minneapolis Federal Reserve bank to guarantee payment on the Missoula affiliate's remaining deposits. The Fed notified the Missoula bank of this deposit, and the run stopped when the official notice was posted in the bank lobby.

• **Structural Changes**—Crises like these put a severe strain on the two bank groups, but they survived. Banco was particularly hard hit, for two-thirds of its assets were in banks outside the Twin Cities. First Bank had just the opposite ratio.

Late in 1932, Banco recapitalized by writing off all intangibles and by adjusting investment in stock of subsidiaries to net tangible asset value. It changed its \$50 par value stock to no par value. A year later, First Bank cut its par value to \$10 from \$25. Neither group was hurt in the bank holiday of March 1933, however; all banks in both groups were solvent.

Under the Banking Act of 1933, both holding companies divested themselves of investment affiliates. To meet requirements of Federal Deposit Insurance Corp., Banco's 108 affiliates also sold \$22.7-million in preferred stock and debentures to Reconstruction Finance Corp. and borrowed another \$3-million from RFC on real



*When fire struck,  
which  
drug company  
had the  
right remedy?*



For the television audience, there was drama in the billowing smoke and destruction, as fire swept through this drug company warehouse. For its management, the half-million dollar blaze spelled disaster.

Negligible damage, on the other hand, was the only consequence of a fire in the Justice Drug Company building, Greensboro, N. C. Here, a Grinnell Automatic Sprinkler System with the aid of firemen quickly stifled what might have been a disastrous fire had it swept toward explosive chemicals stored in the warehouse section.

Grinnell Sprinklers stop fire at its source, wherever and whenever it strikes, night or day, with automatic certainty. 76 years experience proves this. Now, with Grinnell Automatic *Spray* Sprinklers, you get even greater protection against fire. *Less water puts out more fire.*

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## And today America enjoys constantly improving railroad service

To the men who moved westward with a growing America, railroad service meant much more than the novel luxury of the dining car. In fact, the steel rail itself became the very backbone which made possible America's vigorous growth.

And to you, today, railroad service is even more important, because now our way of life depends more than ever on fast, efficient rail transportation. Only the railroads can do the big, basic job of economically moving the mountains of goods which America produces. To improve this service, the railroads have spent more than 9 billion dollars since the end of World War II.

The railroads are continuing to spend huge sums for new track, cars, locomotives, signals—all the things it takes to make railroad service even more efficient and more economical. As a taxpayer, you'll be glad to know that all this money is raised by the railroads—none of it comes from your taxes.

This money buys progress for the railroads—and for all America. It's one big reason why America's railroads can carry more tons, more miles than all other forms of transportation combined—and do it at a lower average charge than any other form of general transportation.



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every Monday  
evening on NBC.

estate mortgages. These funds were repaid out of bank earnings by 1950.

• **Court Fight**—Meanwhile, the growth of group banking was not all roses. Many independent bankers feared the two groups would swallow the district's entire banking system. They got political allies, and in 1933 Gov. Floyd B. Olson, farmer-labor standard-bearer in Minnesota, opened an investigation of Banco.

The case came to a head when all the top officers and directors of Banco were haled into court on fraud charges in Moorhead, Minn., a Farmer-Labor stronghold. J. Cameron Thomson, Banco's president, was tried and acquitted without even offering defense testimony. In February, 1936, charges against the others were quietly dropped.

## II. Reconstruction

Through the late 1930s, both bank groups concentrated on weeding out, rebuilding, and strengthening their affiliates. By 1940, First Bank had reduced its group to 73 banks and eight branches; Banco was down to 83 banks and 21 branches. Earnings were plowed back to rebuild capital structures and to set up reserves against rainy days.

By 1940 both groups were on a firm financial footing. They had ridden out the storm about swallowing up the independents. They showed no signs of wanting to extend their empires; in fact, in 1941, First Bank pulled entirely out of upper Michigan, regarding that area as not truly a part of the Twin Cities' economic sphere.

• **Agricultural Boom**—In the 1940s, bumper farm crops and higher prices, coupled with increased industrial activity, pushed deposits past the \$1-billion mark for both groups—Banco in 1944, First Bank in 1945. Between 1940 and 1950, Banco affiliates nearly tripled their deposits, and First Bank's increased 2½ times. The national average was only a doubling of deposits.

The district remained basically agricultural, though. About the only sign of a shift toward diversification of the economy was a 77% rise in the number of manufacturing employees in Montana, the Dakotas, and Minnesota. This compared with a 50% rise for the country as a whole in the 1940-50 era. Manufacturing remained a small segment of the economy. The four states wholly in the Ninth District had only 1.5% of the nation's manufacturing employment in 1952.

## III. Lineup Today

Between the two bank groups today, there's not a great deal of difference. Banco has 71 banks and 22 branches (these mostly in South Dakota, where branch banking was legalized in the

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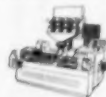
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1930s); First Bank has 75 banks and six branches. First Bank operates only in four states of the Ninth District; Banco also has affiliates in Iowa and Nebraska.

• **Unconsolidated**—Without their affiliates, the two holding companies look pretty much alike.

Banco has assets of \$94.2-million, of which \$85.1-million represents capital stock of affiliates (Banco owns more than 95% of the aggregate capital stock); First Bank has assets of \$90.9-million, of which \$86.1-million is in stocks of affiliates (it owns 96.5% of aggregate capital stock).

In 1953, Banco had gross income of \$3.6-million, a net of \$3.2-million; First Bank grossed \$4.1-million, netted \$3.7-million. Practically all of these earnings were from dividends paid by affiliates. In turn, Banco paid \$2.8-million in dividends (\$1.80 per share) on common stock, plus \$216,433 on its 4.2% preferred. First Bank paid \$3.4-million in dividends (\$1.20 a share) on its common, plus a dividend of one share of stock for each 50 shares that were held.

Banco's preferred stock issue and First Bank's stock dividend reflect the continuing need of both companies for more capital funds to keep pace with the growth in deposits, loans, and investments. Banco issued its preferred in May, 1952; sale of 103,185 shares brought \$5,159,250. The preferred shares are convertible into 14 shares of common.

#### IV. Central Services

The two holding companies operate on much the same policies. Affiliates pay fees for centralized services offered by Banco's staff or by First Bank's subsidiary, First Service Corp. These services include:

- Audits of all banks each year, sometimes oftener. Reports provide the parent companies with data and give local management a fresh slant on their operations.

- Reviews and analyses of bank credit in all its ramifications.

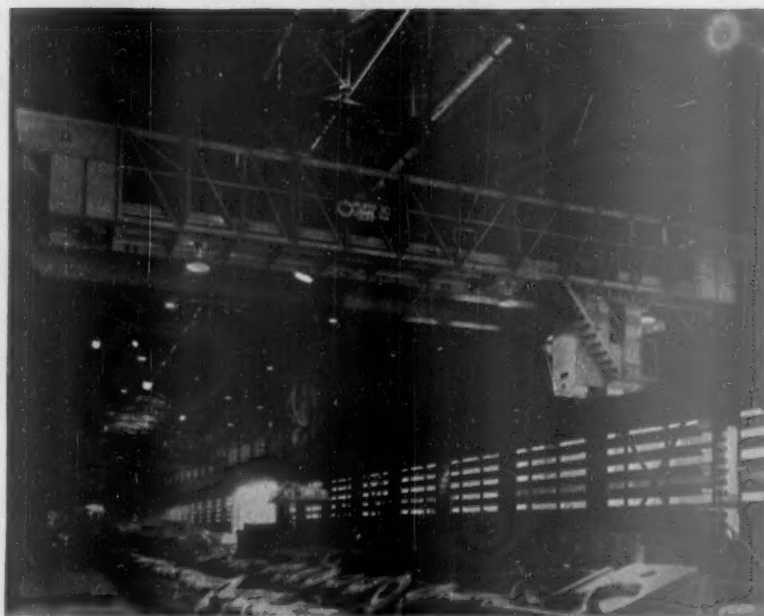
- Advice on investments in bonds. Banco also makes purchases in behalf of member banks, upon request.

- Central purchasing on items where it can save money or where expert advice is needed, as in the case of a complicated new accounting machine.

- Personnel advice, interpretation of wage and salary rules. The system provides a pool of capable personnel to fill the needs of individual banks.

First Bank also has advertising and building departments to assist member banks; Banco prefers to have these matters handled entirely at the local level.

- **Expert Guidance**—In both bank groups, each local bank is governed by



## Another Bedford Mill Type Crane at Timken Roller Bearing Company

The Timken Roller Bearing Company has just installed a new 30-ton Bedford crane over the stripper building in their mill at Canton, Ohio. This is the second Bedford crane to be installed by the Timken Roller Bearing Company at Canton since July, 1952. The new crane has a 61'2" span with 32'5" lift. Built to AISE specifications, it has air-conditioned cab, worm drive gear on the hoist, and welded girders.

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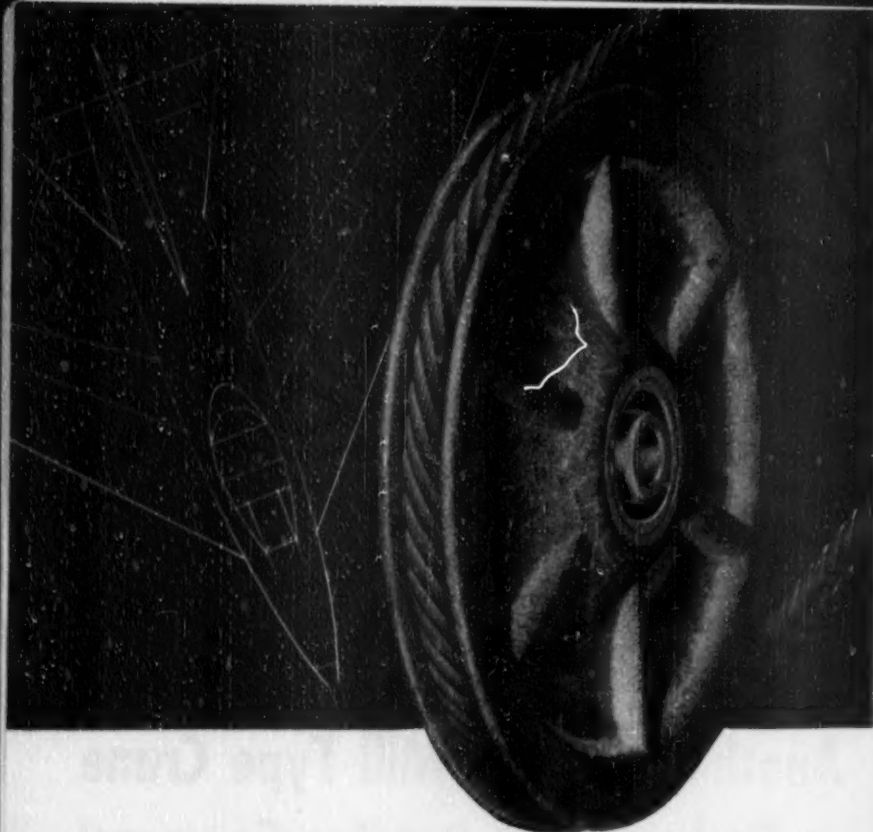
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its own directors and officers, who are generally local businessmen. Of course, with their 95% and 96.5% ownership of a bank's stock, the holding companies can readily substitute directors if matters seem to be getting out of hand.

The greatest management asset of the groups, though, is the fact that altogether the banks have on their staffs experts on almost every phase of banking and business in general. These men can be utilized as advisers in any problem that faces a member bank. Thus, when First National of Minneapolis was considering loans for oil drilling, it turned to an affiliate in Montana that was experienced in oil loans.

Moreover, the groups as a whole can take a longer economic view than would be possible for any bank by itself. Several of the banks have contributed to a study of the Ninth District's resource potentials, which the Arthur D. Little organization is now making.



### Changing the Guard

James M. Symes (seated), a railroader of 38 years' experience, will become the 13th president of the 108-year-old Pennsylvania RR, the world's largest transportation system, on June 1. He succeeds Walter S. Franklin (standing), who reaches mandatory retirement age of 70 this month. Symes, 56-year-old son of a one-time Pennsy baggage master, has been executive vice-president of the road since January 1952.

The new president was born in Glen Soborne, Pa., near Pittsburgh, was graduated from Sewickley High School, and went to work for the Pennsy when he was 18. He has been with the road ever since, except for four years, 1935-39, as vice-president of the Assn. of American Railroads in Washington.

Symes assumes the presidency at a

# How to get all the benefits of office modernization:



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This busy executive wastes time talking to a dozen different suppliers; then he must follow through to see that each delivers on time and as specified. Even then, the job may not be coordinated and integrated for beauty and efficiency. He probably will not get all the profit advantages which made him decide to modernize in the first place.



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BOSTON, MASS.: L. E. Muran Co.; L. J. Peabody Office Furniture Co.  
BROCKTON, MASS.: South Shore Office Supply & Equip. Co.  
CHICAGO, ILL.: Graver-Dearborn Corp.; Horder's, Inc.; Office Furniture Clearing House  
CHICAGO HEIGHTS, ILL.: Cook's Office Equipment, Inc.  
CINCINNATI, OHIO: Globe Office Equipment & Supplies, Inc.  
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DETROIT, MICH.: W. A. Elman & Co.; W. B. Gregory & Son, Inc.  
EL PASO, TEXAS: Field-Parker Co.  
EVANSVILLE, IND.: Smith & Butterfield  
FAYETTEVILLE, N. C.: Hatcher's Office Supply

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HOUSTON, TEXAS: Cargill's  
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Add to this, excellent transportation facilities, abundant raw materials, outstanding recreational advantages and a labor supply largely native-born, and Tennessee warrants searching consideration as an industrial location.

We'll be happy to furnish specific information on the State in general, or on any one of Tennessee's 250 towns and cities. Simply write concerning your needs. A confidential plant location study will be prepared for your particular requirements.

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time when the carrier hopes it is emerging from a deficit period caused in large part by slower steel production. Around 30% of the Pennsy's gross freight revenues come from steel industry traffic. The road had a net loss of nearly \$10-million in the first quarter, compared with net income of \$6.1-million in the 1953 period. In March, expenses were cut 19% under a year ago. Because of this reduction in outgo, the carrier thinks it may have operated in the black last month, although loadings in the first three April weeks ran 23.2% under 1953.

## If Capital Gains...

... are what you want, new Canadian fund hopes to supply them. It's a mixture of open- and closed-end.

U.S. investors on the prowl for capital gains—and nothing else—have a new outlet in Canada under U.S. sponsorship.

The unique outfit is the Scudder Fund of Canada, Ltd., set up in Toronto by the Boston investment counseling house of Scudder, Stevens & Clark. Last week Scudder Fund's first stock offering was registered with the Securities & Exchange Commission. The company was among the first to take advantage of the new SEC policy permitting registration of Canadian investment company shares for sale in the U.S.

• **Mixture**—The Scudder Fund provides a mixture of the open-end and closed-end trust.

On the closed-end side, it will offer to the public some time next month 800,000 common shares at around \$30.

When sale of the issue is complete, Scudder Fund will shift over, in a limited way, to an open-end fund. As such, its shares will be redeemable at any time at asset value. But unlike most open-end funds, Scudder does not plan a continuing offering of new shares. It will also differ from most open-ends in that it will encourage over-the-counter trading in the shares, creating a market where the investor might be able to sell above liquidating value.

Other features of the new fund that are being stressed include:

• Being a Canadian corporation, it will pay no U. S. taxes.

• It will be able to choose between (1) paying Canada a flat 15% of income, or (2) allowing interest received to be taxed at corporation rates while dividend income goes scot free. Canada has no capital gains tax.

• Investment will be confined to



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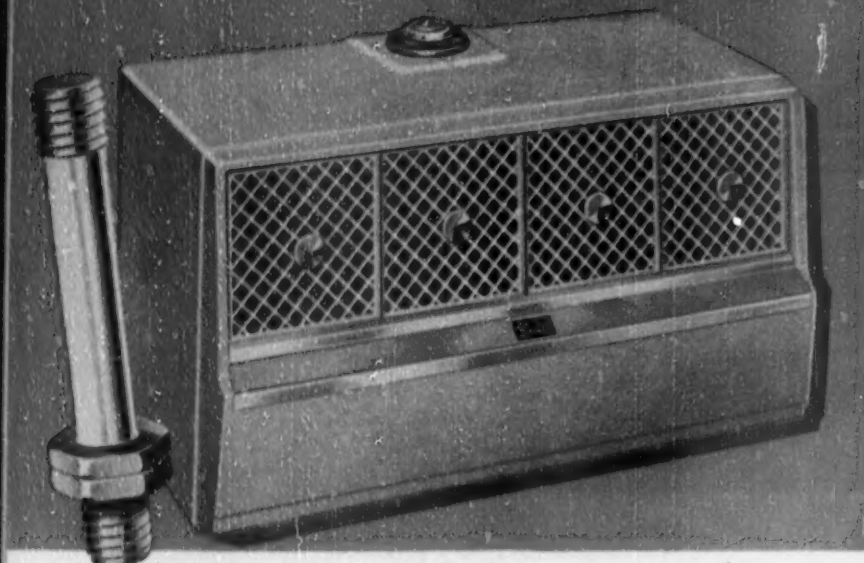
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## Townsend Saves Servel \$14,624 On Part For Electric Room Air Conditioner

The many luxury features you enjoy with Servel's electric room air conditioner stem from careful attention to every detail of design and assembly. This enables Servel to provide the benefits of better health and greater comfort in an efficient, moderately priced unit.

This is possible because no part is too small to be thoroughly analyzed as to function and cost. For example, the part shown here is one of the reasons for the efficient assembly of the unit. Four of them are used to mount the compressor, hold it securely in position to help assure smooth, quiet performance.

Until a Townsend engineer devised this improved part, Servel used an expensive machined part. It was cut from a hexagon bar, tapped to receive a bolt which was held in place by a lock washer.

The part as redesigned by Townsend is made in one piece by cold-forming—threads are rolled for greater strength and accuracy. The bolt was eliminated and replaced with a nut and lock washer in the assembly. Scrap loss was cut to virtually zero. The Townsend part is stronger and just as accurate. Annual

savings amount to \$14,624. Servel effects a big reduction in overall costs—at the same time produces a unit that is jam-packed with quality and performance.

This is merely one example of how the Townsend method of producing fasteners and small parts saves thousands of dollars annually for cost-conscious manufacturers in many industries. On material alone, other companies save from \$3.00 to \$125 per thousand pieces—have reduced assembly time and improved their products as well.

In addition to making the best possible products, Townsend has the versatility to produce regularly more than 10,000 special and standard types. It has the capacity to produce these items in tremendous quantity—60 million every day.

This all adds up to why Townsend has become known as "The Fastening Authority"—a reliable source of quality fasteners at reasonable cost. To learn more about the possibilities of new economies in your operation, write for Bulletin TL-89. Or send samples or sketches of the parts you wish improved and we will have one of our engineers call to discuss your problem.

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**THE FASTENING AUTHORITY**—Experience: over 138 years—Capacity: sixty-million parts daily—Products: over ten-thousand types of solid rivets—cold-headed parts—Cherry Blind Rivets—Twinstap Screws—self-tapping screws—hubular rivets—locknuts—special nails—formed wire parts.

Plants: New Brighton, Pa.—Chicago, Ill.—Plymouth, Mich.—Santa Ana, Calif.

In Canada: Parmenter & Bulloch Manufacturing Company, Ltd., Gananoque, Ontario

companies whose income is derived from sources outside the U.S. The sponsors say the portfolio will be chosen on the basis of "long-term investment performance," and "may be expected to reflect the development of Canadian industries and resources."

• Profits will be accumulated and reinvested, with no dividends being declared out of income or portfolio gains. If the shareholder wants to take a profit he can either sell part of his holdings in the market, or sell them back to the fund at asset value. That means that the U. S. holder of Scudder Fund would have to pay the U.S. capital gains tax—in effect, a flat 25%—instead of the personal income tax, which can take as high as 87%.

## Insurgents Take Over Another Big Railroad

Last week, for the second time within a month, the management of a major railroad was unseated by an insurgent group. The railroad was the Minneapolis & St. Louis Ry. (BW—Aug. 15 '53, p64). Its old board of directors, headed by Lucian C. Sprague, was shoved back by a group led by Chicago attorney Ben W. Heineman.

A few weeks earlier, Patrick B. McGinnis had won the fight for control of the New York, New Haven & Hartford RR (BW—Apr. 24 '54, p33). The third big railroad battle, involving the New York Central RR, will be decided on May 26.

• **Changes**—Heineman's group will hold seven of the 11 places on the Minneapolis & St. Louis board. Among the four "management" directors remaining is John W. Devins, who has been with the railroad for 30 years and will stay on as chief operating officer.

Heineman says he will not be chairman of the M&St.L. board. Instead, he will recommend a five-man executive committee to supervise the railroad's operations. Other recommendations to be made by Heineman's group are that (1) the secretary's office be moved from New York to Minneapolis, (2) the board of directors be increased to 15 members, and (3) a survey be made of the road's condition.

It is rumored that the new group is also thinking of merging M&St.L. with another railroad. The possibility was broached in Heineman's proxy material, although Sprague has insisted that a merger is not feasible now.

• **Shares**—Besides electing Heineman's group to control the railroad, M&St.L. stockholders last week authorized an increase in common stock from 600,000 to 800,000 shares. The increment will be distributed as a 33⅓% dividend to present holders of common stock.

## FINANCE BRIEFS

The New York Central must pay \$7,000 damages to Time, Inc., for reprinting copyrighted material from Fortune magazine without permission (BW-May 8/54, p. 32). Time, Inc., sued the Central for running ads quoting Fortune material hostile to Robert R. Young, who is battling for control of the road.

Kentucky, following the lead of other states, has adopted a policy of earning interest on funds not needed for current expenses. The State Investment Commission will invest these funds in short-term bonds, deposit certificates, and 90-day Treasury notes.

Southern Railway System will lease 50 freight cars—to haul iron ore between Mobile and Birmingham—from American Mutual Liability Insurance Co. The cars, which cost American Mutual \$500,000, will be leased on a 15-year amortization basis to yield 3.4%.

In Michigan, Gov. G. Mennen Williams has vetoed a bill that would have allowed companies incorporated in the state to file secret financial reports. The bill would have allowed corporations to file one public report, giving the location and names of directors, and a separate report on fiscal information to be kept confidential by the state.

Municipal issues for April hit the second highest dollar volume on record, according to "The Bond Buyer." The April figure of \$725.5-million brings the four-month 1954 total to \$2.1-billion. That's \$572.6-million above last year.

General Motors Acceptance Corp. purchased receivables totaling \$1,586,000,000 in the first quarter, slightly more than the \$1,577,000,000 figure for first-quarter 1953. Receivables outstanding as of Mar. 31 were \$2.6-billion, a rise of 38% from last year. Net income jumped from \$6-million in 1953 to \$9.9-million this year.

The Senate, by a 39-37 vote, shipped back to committee a bill that would have allowed the Interstate Commerce Commission to authorize temporary railroad rate increases. The bill would have allowed ICC to grant railroads the temporary increases until it considered a permanent rate. Carriers were to make refunds "upon demand" if the permanent rate proved lower than the interim level.



## How To Enjoy The Economy Of Townsend Cold-Formed Parts

The parts above are not only less expensive than similar items made by other methods, but they are currently saving assembly time, improving quality, design, and appearance of a multitude of products for economy-minded production engineers and designers in many industries.

These parts are but a few of the thousands of types of special parts and fasteners made by the Townsend method which, because of its speed, is economical. Since there is virtually no scrap, material is conserved—you get more pieces per pound of metal.

In many instances it is possible to include washers, nuts and spacers as integral parts of the piece. This reduces assembly time and employee fatigue—eliminates separate inventories and extra parts.

Design is simplified by the Townsend method since it is possible to cold-form unusual shapes such as offsets, wings, flats, ovals—they need not be symmetrical and concentric as with screw machine parts. The basic shape then

may be further processed by machining, trimming, flattening, bending, drilling and thread rolling.

Since cold-forming increases tensile strength and the flow lines of the metal follow the contours of the piece, your product is improved by having extra strong parts with high resistance to shock and fatigue. Also, Townsend draws its own wire specifically for each application which assures close size tolerances and uniformly good surface finishes. The inherent quality of the parts is high because materials that can be readily cold-formed must be free from inclusions, seams and surface defects. They also must be ductile and highly resistant to cracking.

Townsend supplies these high-quality items in carbon, alloy, stainless steel, copper, bronze, monel, and aluminum in a variety of platings and finishes. Sizes range from diameters of .090" to 1" and lengths of 1/8" up. For more information on the economy of Townsend products, use the coupon below or write for illustrated bulletin.

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# HABITS



**HITTING THE TRAIL.** 68 Spokane cattlemen and saddle addicts set for their expedition of the year—a 200-mile horseback jaunt

across Washington State to cattlemen's convention at Okanogan—wait the go signal from trip leader Charles Glover.

## When Ranchers Convene,



**SIDELINE SPORTS** ran from impromptu rodeo to . . .



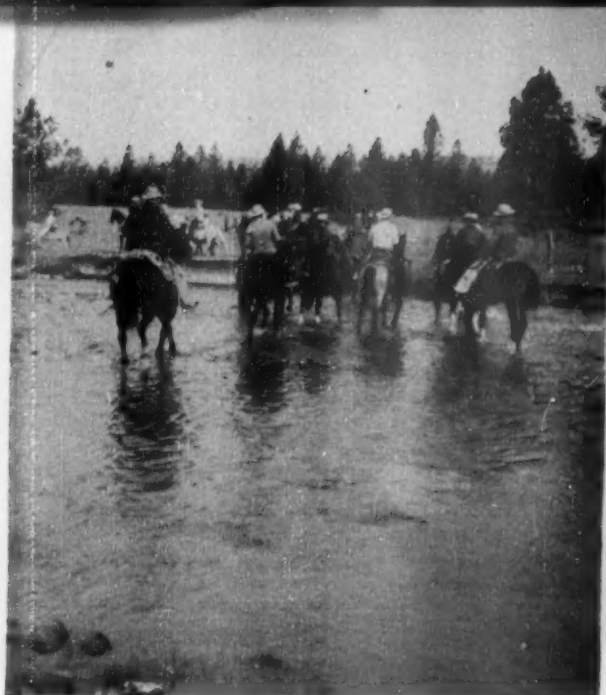
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**HORSEPLAY**—call it wrangler-style relaxation—and . . .



**HORSE TRADING.** This wild horse was caught en route.



**ACROSS STREAMS**, through backwoods, over mountains—averaging more than 30 miles daily—it's a rough ride and . . .



**AT CAMPSITE** ranchers—and some businessmen—fall to as supply trucks and chuck wagons do their stuff. In the Northwest . . .

## Getting There Is Half the Fun



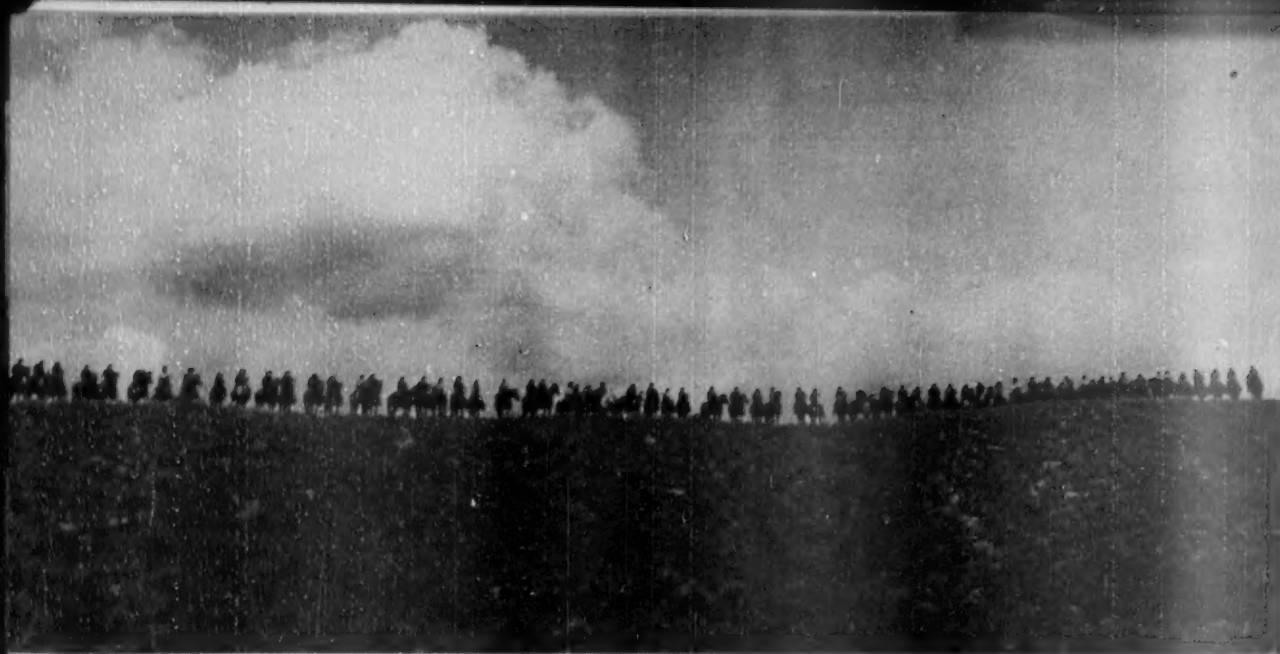
**FERRY-BORNE** caravan got a lift across Roosevelt Lake in the Columbia River.

The annual convention of the Washington State Cattlemen's Assn. boasts the usual share of bustle and buoyant spirits, but one delegation from Spokane found last week's activities tame as a rest cure. For the Spokaneians, the convention was an anticlimax compared with the feat of getting there—in a horseback cavalcade that hoofed it across 200 miles of the state's timberland, sagebrush hills, streams, and snow-patched mountains.

The saddle-happy band carried out a seven-year-old tradition. Back in 1948 Charles Glover, head of a cattle commission house in the city, got an idea that stirred his imagination. "I planned to go horseback to the convention alone. I wanted to see the back country and the mountains. It got in the papers and the idea caught fire—47 men went with me." Glover and his followers have been doing it the hard way ever since.

• **Cattlemen's Caravan**—This year's convention was staged at Okanogan, in north central Washington. Glover mustered his men on the outskirts of Spokane on May 8.

The troop that gathered ranged in age from a 76-year-old to a 10-year-old cowpoke. Most were cattlemen, ranchers, or businessmen with wrangling backgrounds. But almost a quarter were



OVER A RIDGE in the sagebrush country, Washington band peers ahead, can almost spot its destination, Okanogan, after . . .

## Six Days on Horseback

men who had simply breezed off from an office desk for a week in the saddle—including a couple of genuine drug-store cowboys, a druggist, and a wholesale drug salesman.

The assembled caravan looked more like a convoy than a pleasure jaunt. Besides the riders there were 27 ranch hands to drive a fleet of trucks hauling supplies. There was an extra mount for every two men—and some took more horses along to train.

• **Ah, Wilderness**—Once they hit the backwoods, the ride was no place for dudes. The group pushed from 30 to

50 miles a day all week. They rose at 4 a.m. and pulled into camp as late as 8 p.m. one night—by flashlight. Glover explains, "I try to keep the trip rough enough so it weeds out the playboys"—and the women.

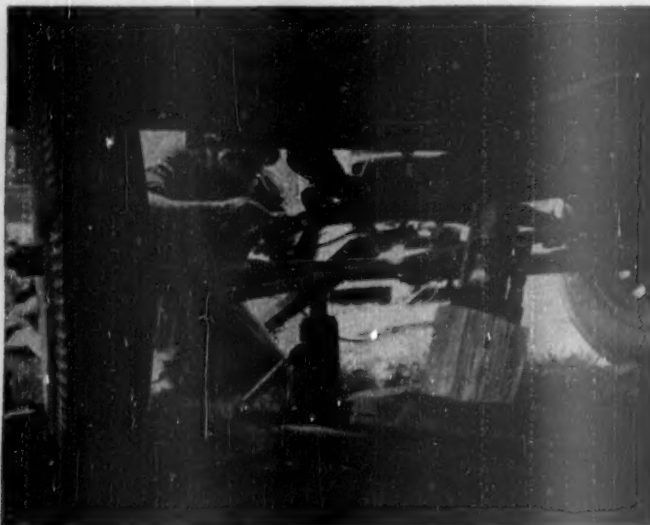
• **Comforts**—But on one point—food—the group drew the line on rough-and-ready living. The fleet of trucks and chuck wagons met them at each campsite. With three cooks on the job, the riders chewed their way through 1,000 steaks in a week. As for beverage, Glover puts it mildly, "Whiskey is sometimes substituted for water."

The tab for the trucks, cooks, food, and horsefeed came to something like \$50 a rider, the whiskey anywhere up to \$25.

• **Inner Man**—Glover's longest trip was about 360 miles. Since 1948 he's led the way to Omak, Colville, Centralia, and Yakima as well as Okanogan. When people ask Glover the secret of the trip's success, he likes to quote the explanation of a noncattleman, a doctor who confided on one expedition, "I don't know what makes me so happy. Back home I'm surrounded with inhibitions. Out here I feel free."



**HORSE TROUBLE** develops as a mount gets belly-ache, takes a giant pill while . . .



**WAGON WORRIES** begin when chuck wagon ends up with a broken axle that calls for a first-aid job of welding.

## SITUATION UNDER CONTROL

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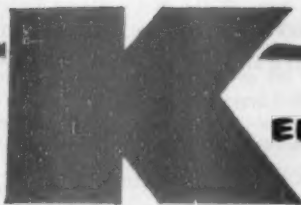
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## LOCAL BUSINESS



### Gumming Up the Bus

**SPRINGFIELD, OHIO**—Springfield City Lines, Inc., in common with every transit company in the country, has been plagued by rising costs ever since the war. Now it has come up with a new way to help meet them, which has been so successful that transit companies in other cities are beginning to copy it.

The company's solution: Install penny-in-the-slot gum machines in the buses. The company started experimentally with just one bus about a year ago; the idea worked so well that machines are now in operation in all 62 buses.

For several months the company used machines owned and serviced by Automatic Mobile Vendors, Inc., of Springfield, and got 15% of gross sales (from \$3 to \$6 per bus per week). In March it bought the machines, which means that its percentage of gross is now a good bit higher, though it won't say how much. But even if the net only comes to \$1 a week per bus, for a 60-bus fleet that would add up to \$3,000 a year—a nice bit of added income for a company that has been running close to the breakeven point, one side or the other, for several years.

The machines are particularly popular on school-bus runs.

### The Shrinking Taxi

**NEW YORK CITY**—For a good many years, New York has been the only city in the country that did not permit the use of regulation stock automobiles as taxicabs. Rules required specially built cabs that would accommodate five passengers in the rear, with a glass partition between the front and

rear seats and no seat beside the driver. Efforts to change the law always failed because of the adamant stand by city authorities that the special regulations were necessary for passenger safety and comfort.

Now, finally, New York is to try out the stock-car cabs. Last week Police Commissioner F. W. Adams reported that a study of cab operations in other cities had convinced him that stock cars were worth a trial in New York, even though he's still not sure they'll work out satisfactorily. His approval was the last step needed to make effective a local law permitting the new cabs; it allows them to be operated for an 18-month trial period that will start July 1.

### Update

**MONTGOMERY, ALA.**—This state's controversial textbook law (BW—May 8'54, p178) is controversial no longer; it's dead. Last week, Circuit Court Judge Walter B. Jones declared it unconstitutional.

The law, passed almost unanimously last year, required publishers to attach a label to all textbooks guaranteeing that neither the authors nor any writers mentioned in the books had ever been connected with any subversive organization. Judge Jones was quite vehement about it. He said the law is "unreasonable, arbitrary, and oppressive... unworkable, vague, and indefinite... void and unenforceable and in violation of the due process clause" of the U.S. Constitution.

It's practically sure that the state will not appeal the decision, since both the governor and the attorney general had previously called the law unenforceable.



**... and greetings to a profitable idea!**



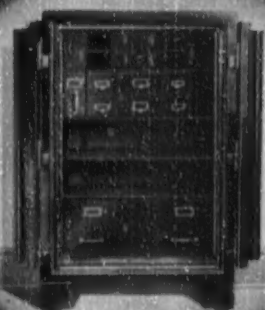
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# REGIONS

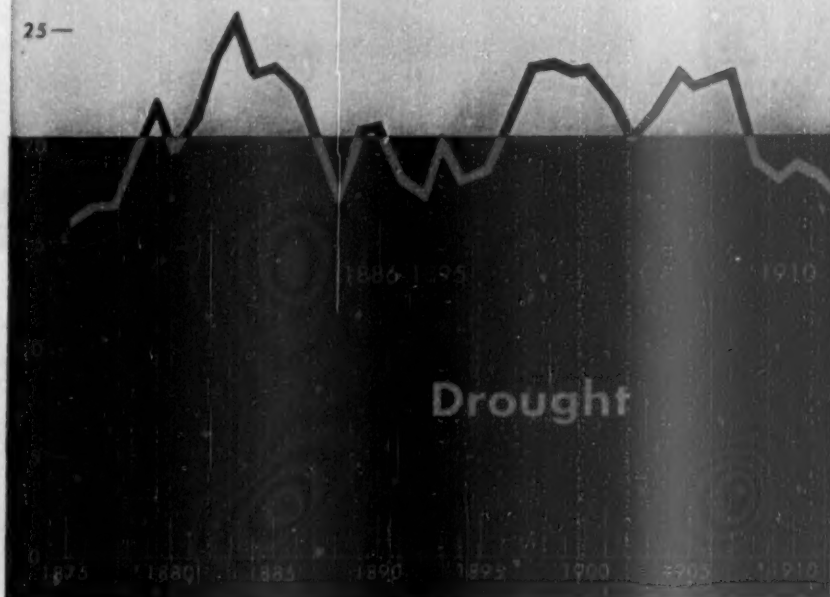
## In the Southwest: The

Yearly Rainfall by Inches

30—

(A Five-Year Moving Average)

25—



## Farms Dry Up Again

This year, once again, as often in the past (table, above), dust is blowing through the air of the Southwest. And this year once again, headlines, not only in the Southwest but throughout the country, are screaming desolation, catastrophe, and "worse than the 1930s." Once again the question is: How serious is the drought, really?

The answer. It's serious, all right, but not that serious (especially in view of the favorable rains of the last couple of weeks). For one thing, it's been worse than this before. For another, it could have been lots worse this time. The county agricultural agent of one of the worst hit counties in the area put it this way: "The situation is serious, but it's not a catastrophe; the publicity has been almost as bad as the blowing."

• **Old-Timer View**—A letter to the editor of the Dallas News last month sums up the way some old hands feel: "The whole Southwest may as well be content with drought, duststorms, and other distresses to crops. We've had all of these hardships, to my own observation, for 72 years. . . . These Western

states will never have much rain. God Almighty did not design them that way."

Scientific evidence bears out this old-timer's observation. "It's amazing," says one Weather Bureau official, "what short memories people have. The Southwest has always had a drought problem. And it always will."

Look at the dips in the rainfall pattern in the Southwest since 1875 (chart), and you begin to see what he means. The records show at least four times when the plains dried up—1886-1895, 1910-1918, 1930-1939, and the years since 1952.

• **And Still Older**—But you have to go back before the Weather Bureau started collecting rainfall data to get the full pattern of dry and wet periods.

Way back around 1200 A.D. American Indians were building pueblos and growing irrigated crops along the Canadian River of Texas. Panhandle Man, as the archaeologist calls him, disappeared around 1450. Why? Best guess—drought.

A century later, in 1540, Francisco

## Drought Comes in Cycles



## —But Farmers Stay Put

Coronado led the first Europeans onto the plains in search of the fabled kingdom of Quivira and its seven golden cities. What they found was vast herds of buffalo and a fine stand of buffalo grass. They undoubtedly hit a series of wet years.

But look ahead another three hundred years, when the westward expansion of the U. S. was reaching the plains about 1820. Stephen Long, an early explorer of the mountain West, dubbed the whole area including the plains the "Great American Desert." The name stuck until well after the Civil War, then was limited to the always arid area west of the plains.

In the 1870s land hunger drove ranchers and homesteaders out on the plains, only to be repulsed by the 1886-1895 dry period.

So the cycle goes—right up to 1954.

• **Getting Used to It**—What about the future? Are there any signs of a change in climate that might make Southwestern weather more stable? On the basis of the scanty data the experts have on the whole subject of climatic change,

they say there's every reason to believe the next 70 years will be just like the last.

For people in the Southwest, this means learning to live with their weather. To quote another old-timer: "It don't rain every time we want it to, and it don't quit raining every time we want it to, but we have about as much control over the weather here as they have anywhere."

• **Contrasts**—The area does have a more fickle climate to deal with, though. Lop off the always moist coastal fringes, and the inland U. S. divides up, climatically, into humid East, arid West, semi-arid Plains States.

In the humid East, precipitation is usually adequate for raising crops and supplying human needs. The East may not like its weather, either, but it is a little more predictable. Droughts, in the sense of lack of water, are usually short-lived, local problems. The main headache isn't quantity of water supply, but quality—the question of pollution.

The arid West has a different kind

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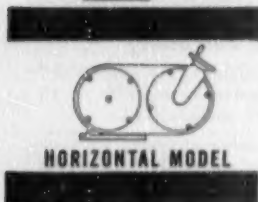
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of headache—but there's no question that irrigation is the medicine needed to cure it.

The semi-arid plains area has some pollution and irrigation problems, too. Some of the water is hard (that is, it contains minerals in solution) and has to be purified for some uses. Where irrigation is practiced, the rate at which underground water is pumped out means a lot.

• **Undependable**—But it's the undependability of the climate that makes life tough on the plains—and makes it hard to find an answer that sticks through the peaks and dips of the cycle. No single answer will help a farmer get along in the long stretches with plenty of water, and in long years without enough.

The people of the Southwest have had to unlearn a lot of things their forebears in the humid East learned the hard way. They've had to try to answer this question: how to take advantage of the good years without bringing on the punishment the dry years can inflict—the grimy, dirty sort of tragedy that comes with the clouds of dust and wears down the nerves.

• **Learning**—What's happening in the present dry dip of the cycle shows that the people in the Southwest have found at least some parts of the answer.

Old-timers who lived out the droughts of 1930-1939, or who were forced to leave their land but came back in the early 1940s, say the present drought is the worst they can remember. They are partly right—in the sense that there is more bad soil blowing around.

On the other hand, farmers in the area started in with better pastures, larger bank accounts, less debt, better soil conservation methods.

"It was actually drier this spring and there was more blowing than during the 1930s," says John C. White, Texas Commissioner of Agriculture. "But farmers are smarter now. Conditions were more serious, but they were combatted with more efficiency through cover crops and improved plowing methods."

Better care has paid off. Fewer farms have been abandoned, and there have been no mass migrations to California as in the 1930s. Land values have remained generally high. No one is buying drought land at giveaway prices.

Even the gags are more hearty, as the story of the farmer's wife in Liberal, Kan., who was hit by a drop of water and needed two buckets of sand to revive her. Or the reply of the Texas rancher to a friend who talked of robbing a bank in despair: "If it doesn't rain soon, I've already robbed a bank."

• **Diversifying**—Another factor that is keeping things on a more even keel this time is oil activity in some of the

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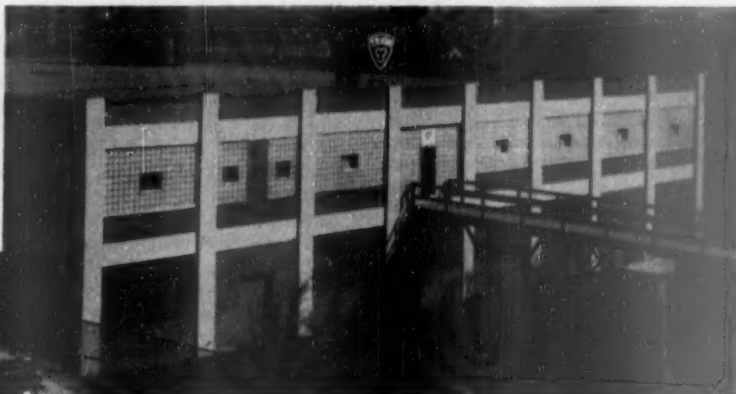
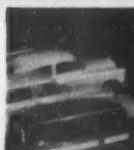
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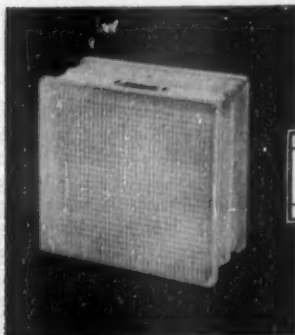
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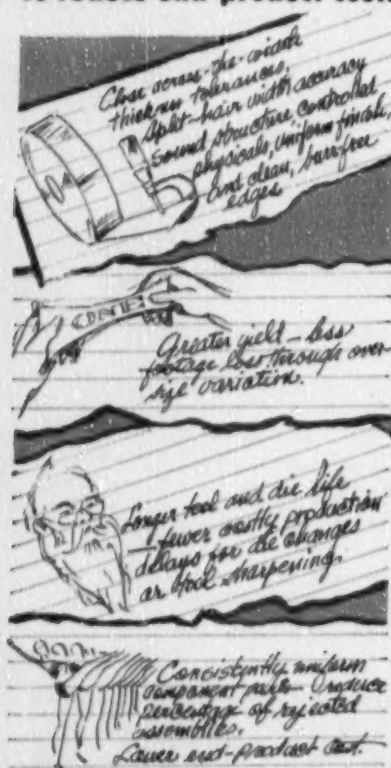
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drought areas. Many ranchers and farmers get sizable rental payments from oil leases, or royalties from oil production on their land.

There's another reason, too, why some farmers and ranchers are driving air-conditioned cars to drought relief meetings. Many of the bigger operators are wealthy investors whose diversified interests include oil, a store in town, an urban apartment house, in addition to farm land. It's not uncommon, either, for one person to own a string of farms and ranches up through the plains belt from Texas to Canada. Many Texans own Dakota farms.

• **Backsliding**—Some resident owners in the area blame part of the trouble on these so-called "suitcase" farmers and "drugstore" ranchers. They claim that absentee owners put in a crop when conditions are good, then leave the fields to the winds when water fails. They may have a point. High support prices for wheat, cotton, and livestock during and after World War II encouraged many marginal operations.

But it's hard for a resident owner, too, to hold to his drought-year good intentions, and resist the chance of a quick profit. Says one on-the-spot observer: "It was \$2 wheat against grass, and Kid Wheat won easily. In Texas, it was 40¢ cotton against grass."

• **Relief**—So, with the plains again going dry, the Southwest still hasn't fully licked its weather problem, and many needed steps lie ahead.

Most immediate, of course, is relief for sufferers in the present drought. Local, state, and federal governments have already acted. Just last week, Congress passed and President Eisenhower signed a bill allocating \$15-million to share the cost of wind erosion control measures with individual farmers and ranchers. (This money will be allocated on the basis of recommendations by each state governor.)

• **Grass**—A long-range program has to wait until rain comes again to the area. As long as land is blowing and drought continues, you can't put the land back to grass any more than you can plant some other crop.

But a lot of the land that is blowing should never have been plowed up, and the long-range remedy means converting maybe 8-million or 9-million acres to permanent grassland where the soil isn't suited for cultivation. There's a limit, though. Ken Chalmers, head of Colorado's Soil Conservation Service, says: "The often-advocated policy of putting this whole region back to grass is impossible and impracticable. There are excellent farm lands within it which can return farm incomes and need not blow."

Even on the shallow soils and rolling lands it's hard to persuade farmers who are having good crops and profits in

wet years that they must turn the land back to grass.

• **Program**—Any plan to bring them around will probably have to look something like the program introduced last month by Colorado's Governor Dan Thornton.

Basic to his proposal is a system of land classification. Every acre would be classified in line with what it will most effectively produce on a sustained yield basis. There would be a practical educational campaign to make sure each acre was put to just that use—and if education failed, teeth in the form of the grant or withholding of aid payments, crop insurance, and other benefits.

Together with this, Governor Thornton proposes long-range research on the many factors involved in land use, such as erosion control, water uses, credit systems, land ordinances.

• **Drastic**—This may seem like a stiff order. But many students of the plains feel that if dust bowls are to be avoided in the future, either the state or federal governments or both will have to assert control over land use to a degree never before known outside of urban areas.

## REGIONS BRIEFS

The monopoly value of a gas station along a turnpike (BW—May 8 '54, p. 186) has risen to a new high. For the privilege of operating a station near Ardsley on the New York Thruway, Sinclair Refining Co. will pay the Thruway Authority a royalty of 8.03¢ for every gallon of gas it sells, plus 10% of gross receipts from all other sales. The 8.03¢ figure is almost exactly 50% more than the national average retail gas station margin of 5.36¢ a gal.

Suburban communities faced with the choice of incorporating, annexing themselves to central cities, or trying to maintain their status quo, may get some help from a publication titled Guide for Community Action. Published by the Bureau of Public Administration, University of California, Berkeley, the 164-page guide is addressed specifically to California problems, but many of its conclusions are generally applicable. Price: \$1.50 plus postage.

Intercity helicopter passenger service in the Northeast is scheduled to start June 5, when Mohawk Airlines starts flying regularly from Newark Airport to Liberty, N. Y., in the heart of the Catskill Mountain vacation area. A Sikorsky S-55 will be used; time for the flight will be less than an hour, compared to a conservative estimate of three driving hours.

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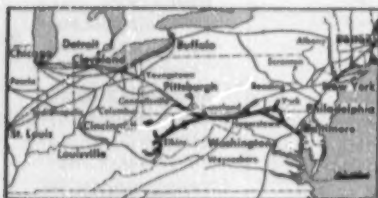


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## Straight Facts about the Direct Route



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# GOVERNMENT

## Cooling Executives' Ire

● It can be done, says a Yale professor, even when government is telling management how to run its business.

● Just let the executive keep his self-respect, he advises, in a new book from the Yale press.

Take a man whose ideal is to build up a great business from a shoestring. Throw him in with a man whose idea is never to stick his neck out. Ask them to interpret laws and government regulations together, and what will you get?

Just what you'd expect—and just what American business has got in the past 20-odd years—a running guerrilla war with government.

Robert E. Lane of Yale University talks about this war in his little book, *The Regulation of Businessmen* (Yale University Press). In some ways, it comes close to being a handbook for bureaucrats that could have been titled, *Why Businessmen Get Mad*. They get mad, says Lane, because government regulation—in the person of the bureaucrat—comes along and deals one blow after another to his self-esteem.

● **View from Mars**—Lane is a political scientist who made a wide detour among the psychologists; he followed that by talking with businessmen and reading business-sponsored literature. Businessmen who pick up his book may get a feeling that they have been observed by an intelligent secret agent from Mars—who has an odd slant on things, but who sees things pretty clearly just the same.

He recognizes the businessman's traditional complaints about bureaucrats, tears them out of their usual political or economic context, and plunks them down among the psychological stresses of modern life. If you're worried about the H-bomb, how do you feel about an agent from the Federal Trade Commission or from NLRB? Unless the author is wrong, the super-bombs don't really jar you any more than the idea of having a \$6,000 government employee tell you how to deal with labor, or what is fair advertising.

● **Internal Strains**—These stresses come about in a lot of ways. For instance, take the businessman's traditional view of himself as reported by Lane:

- He is a man of honor.
- He is a member of an elite group that rises to the top solely on ability.
- His rewards are modest compared to the good he does for society as a whole; if he strikes it rich, he regards

his wealth as something held in stewardship for the good of all.

• He is the natural ally of, and spokesman for, union labor, because wages come out of production.

In the face of this self-appraisal, along comes the complex of New Deal regulations challenging these concepts. The government knows best, bureaucrats know best, politicians know best. Result: The businessman is deprived of the self-image that he has held so dear. As Lane points out, bolstered by an impressive accumulation of scholarly footnotes, this is tough on anybody—U.S. businessman, Navajo Indian, or Australian bushman.

• **Cost of Regulation**—The author makes a strong case for his thesis: that the heaviest cost of the long series of New Deal regulations is not economic—in terms of records that have to be kept, or profits that have to be foregone. Rather, he says, it is in terms of psychological pain inflicted on the businessman as an individual. That pain, he argues, is the real cause of the reaction of businessmen against the new regulations.

By a detailed study of businessman literature, Lane charts a steady decline in opposition to most of the regulations. But he doesn't promise it will entirely disappear with time. There is too much basic conflict between businessman and bureaucrat—stemming back to personality traits, different definitions of common words such as "profit" and "fair," and a desire for praise from entirely different groups, one centering in the Detroit Athletic Club and the other in the U.S. Civil Service Commission.

• **GOP Therapy**—This may explain the disappointment that many business executives feel in the Eisenhower Administration. It's still government, still bureaucracy, even though it is spelled R-E-P-U-B-L-I-C-A-N.

Lane suggests that when government has some new regulations to impose, everything possible should be done to do it without injuring the ego of businessmen. He suggests the need for psychological therapy along with economic regulation.



## Grandpa's family now numbers millions...

The contented old gentleman relaxed in his 1924 living room probably had little knowledge of the *technical* details which made his radio work. Much less did he realize that they were forerunners of the magical entertainment which his grandchildren would *see* and *hear* in the 1950's.

Things like totally shielded chassis construction, automatic volume controls, pre-selective tuning and built-in phonograph jacks—these were part of the original Stromberg-Carlson radio family and they have passed down to you, in today's living, a wonderful heritage of quality.

The five-dial radio receiver shown on the table in the illustration above was a very popular set in the 20's—even though you had to read a twenty-seven page instruction book before you could tune in Clara, Lu and Em! Quite a contrast with the

1954 "Panoramic Vision" 21-inch TV, where a mere flip of two dials brings you clear, distortionless, locked-in picture and sound—and eventually will provide the world's finest free entertainment for you in full color!

You who enjoy this Stromberg-Carlson television receiver today are profiting from the ingenuity of the engineers who developed the first Stromberg-Carlson radio—and never stopped searching for ways to improve it!

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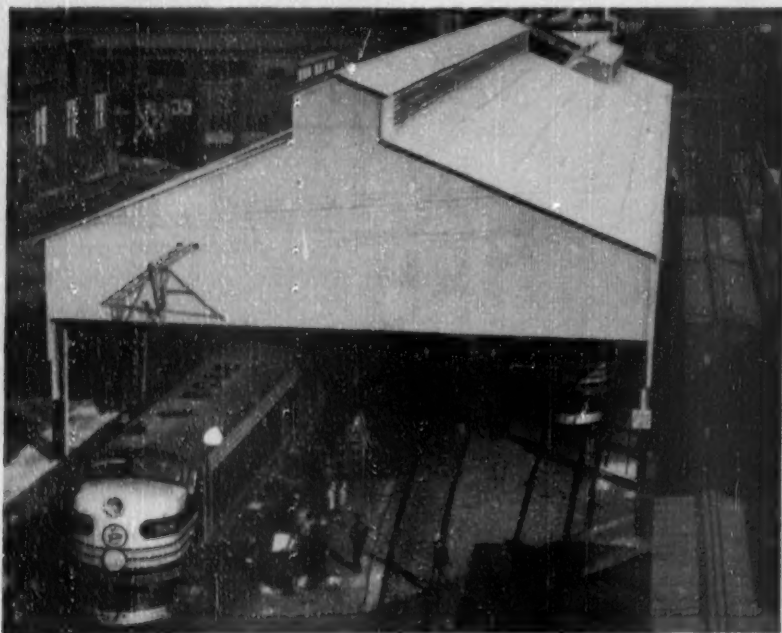


Photo by Office Files—Pine Bluff

Diesel engine shed, St. Louis Southwestern R.R. Co., Pine Bluff, Ark. Roof and sides of "Century" Asbestos Corrugated. Erection Contractor: Mound City Erection Co., St. Louis, Mo.

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## Expanded Index

FRB's new yardstick to measure consumer durables output includes 24 additional items.

A new monthly index of production of consumer durables, just released by the Federal Reserve Board, is more stable than the old index. It includes:

- An improved and expanded index of major consumer durables.
- A rather sketchy index of other consumer goods.

In the new index, as in the old, the weighting factors are based on 1947 Census of Manufactures data for gross factory value of production, rather than for value added by industry—as in the case in the index of industrial production. The base period is 1947-49, and the index is calculated beginning with January 1947. But the new index is more stable because it includes such items as auto repair parts and miscellaneous home and personal items, which fluctuate far less than major durables.

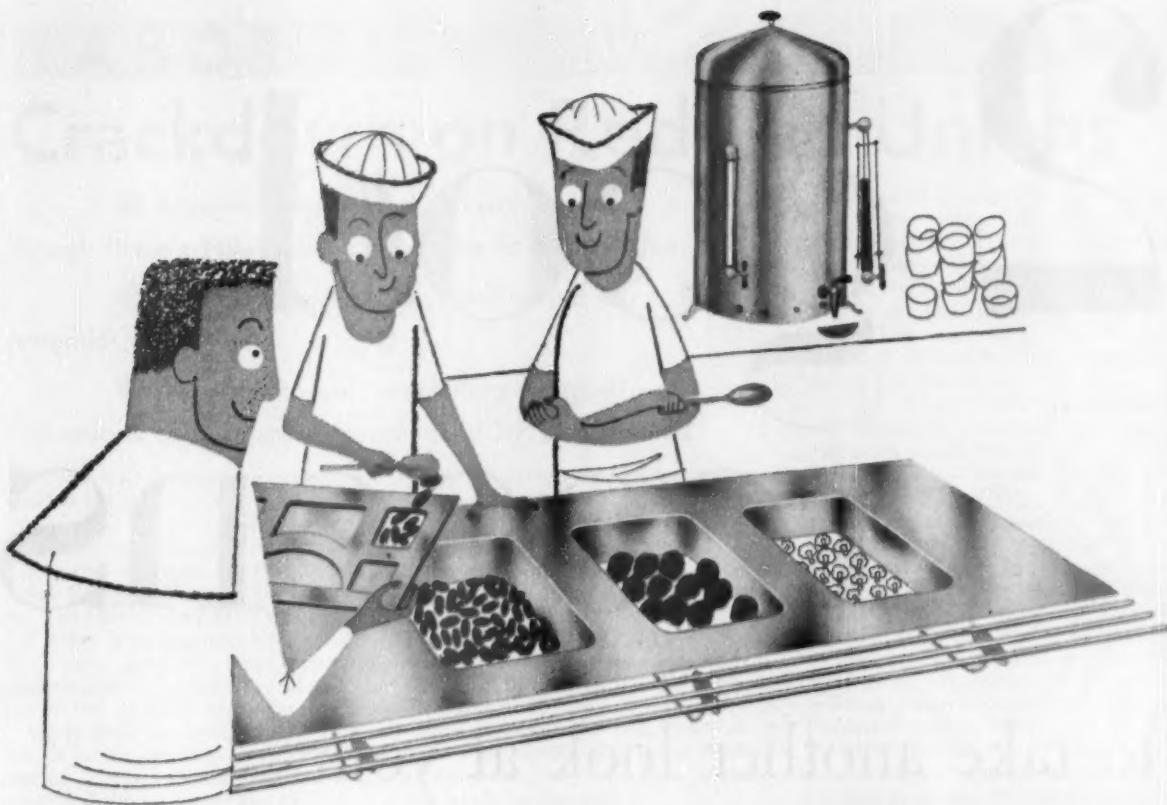
The index covers only durable goods of the type usually sold to consumers in the domestic market. But since it is intended to measure total output of these goods, total production of these items is included in consumer durables—even if they are purchased by business. Items for export are included, but imports are not.

Peak output or total consumer durables came in August 1950, when the index hit 151 (1947-49=100). It reached bottom in July 1952 during the steel strike, when the index fell to 82. On the old index, the peak was 166; the low point was 71.

• **Added Points**—Production covered in the new over-all index represents about \$14.7-billion in factory value of output, compared with \$9.2-billion covered in the old. There are 24 new monthly measures—13 in the expanded major consumer durables output index, 11 in the other consumer durables index.

The 13 additional products are: room air conditioners, dehumidifiers, dishwashers, food waste disposers, sewing machines, gas water heaters, electric water heaters, residential mechanical stokers, auto trailers, bicycles, motor cycles, cotton rugs, linoleum, and asphalt-base floor coverings.

The catch-all index includes: motor vehicle repair parts, auto replacement tires, storage batteries, cutlery, home glassware, pottery, miscellaneous leather ware, watches and clocks, eye glasses, small appliances, records, some electrical products, and jewelry, silverware, musical instruments, toys, and sporting goods.



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# LABOR

## Crackdown on Red-Led Unions

● Administration comes up with a definite program, though there's little chance of action at this session.

● One bill urged by Brownell would allow firing of potential saboteurs.

● The other creates machinery to squelch any sensitive unions or companies dominated by Communists.

Communist-dominated unions got another jolt last week. The Administration finally came up with a definite program to put them out of operation.

Previous attempts by the National Labor Relations Board to cut off access to Taft-Hartley benefits on elections and unfair labor practices have failed in the courts. And the non-Communist affidavit that T-H requires of all officials has proven unwieldy and ineffective.

Up to now, employers cannot legally fire suspected subversives—except from specific defense contract jobs—and Red-controlled unions, using the protection of Taft-Hartley, can force employers to bargain with them. It is this situation that the Administration seeks to cure.

• **Too Late**—Attorney General Herbert Brownell presented the program to Congress too late for action before adjournment. A subcommittee of the Senate Judiciary Committee held five months of hearings, and only this week is ready to make a report favoring similar legislation. Three proposals have been under consideration, submitted early last year by Senators John M. Butler (R-N.D.), Barry Goldwater (R-Ariz.), and Pat McCarran (D-Nev.).

The Goldwater bill—which is most like the Attorney General's own bill—and the Butler bill both would give the Subversive Activities Control Board authority to eliminate Communists from positions of control in unions. The McCarran bill would permit employers to discharge employees who remain members of organizations on the Attorney General's subversive list and would make it unlawful for a Communist to be a union officer.

• **Rebellions**—Even so, the handwriting is on the wall. Red-led unions have had plenty of trouble since they were kicked out of parent CIO organizations. Some face rising rank and file rebellion against their leaders. The NLRB, after several unsuccessful moves, now is making it easier for dissident members of Red-led unions to overthrow leaders and break Red ties (BW—May 15 '54,

p164). And the Administration's program comes at a time when sentiment in Congress is growing for some kind of legislation: Senators Hubert Humphrey (D-Minn.) and Paul Douglas (D-Ill.), both staunch liberals and labor supporters, came up with their own Red-union bill last week. It would nullify recent court decisions and declare that the NLRB has the authority to withhold its services from a union where it doubts the bona fides of its officers' non-Communist oaths, or where an officer has been convicted of swearing falsely in the oath.

The program drafted by Brownell and introduced by Sen. Homer Ferguson (R-Mich.), GOP policy committee chairman, is embodied in two bills.

• **"The Defense Facilities Production Act"** would permit employers to fire employees who the government finds are likely to engage in sabotage or espionage.

• **"The Communist-Infiltrated Organizations Act"** would set up government machinery to put out of existence any union or business concern found dominated or directed by Communists or members of Red organizations and in a position to harm national security.

This bill prescribes a step-by-step procedure before the Subversive Activities Control Board, to determine whether a union is "Communist-infiltrated." A union would have to appear before the board to defend charges filed by the Attorney General. A union found to be infiltrated—or one that failed to defend—would be ordered to dissolve, the order backed up by the injunction and contempt powers of the federal courts.

Such an order, for example, could deprive certain union officers of any hand in union affairs, name "trustees, to supervise the dissolution, enjoin payment or collection of union dues."

• **The Tests**—Infiltration would be determined on the basis of tests including the following:

• The extent to which people active in the union are also active in or

members of Communist organizations.

• The extent to which union money and personnel are used to promote Communist objectives.

• The extent to which union policy follows the Communist line.

• The extent of the union's position and capacity to hurt the economy in time of emergency.

When a board order becomes final—60 days after it is issued, if not appealed—a union would lose access to NLRB. The board would not supervise any election requested by the union, nor process an unfair-labor-practice charge it filed. Any union shop agreement won by the union would be voided. No employer could be required to bargain with the union. Neither would it be an unfair labor practice for an employer to refuse to hire or to fire anyone who tried to get recognition of the union.

• **Broad Powers**—Under the proposed Defense Facilities Production Act, the President would be given broad powers necessary to bar subversives from civilian production plants. The terms are broad enough to cover any plant in time of an emergency, but emphasis has been put on power plants, mines, and other plants supplying defense matter.

This system would probably work much the same way as government security clearance for employees working on defense contracts.

The exact operation in getting rid of such employees would have to be spelled out in executive orders. But it's clear that employers would be free—if not under orders—to fire an employee pinpointed by such a hearing.

Legislation of this character is bound to stir up hot debate. The two bills are the last of 10 proposals submitted by Attorney General Brownell to "plug gaps" in existing law dealing with internal security. Some of the others—like use of wiretap evidence, and immunity from prosecution to force self-incriminating testimony—already have caused much controversy.

Both the CIO and the AFL also have spoken out against bills dealing with Red unions. CIO and AFL feel that democratic unions can deal with the problem of infiltration, without new legislation.

On the other hand, companies plagued with wide employee-representation by Red-led unions, along with the National Assn. of Manufacturers and the National Chamber of Commerce, are in deep sympathy with the basic principles of the new proposals.



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*Here's Why:* "For 16 months, we conducted a proving ground for five leading makes of fork trucks at our Kingsport, Tenn., home terminal," says Mr. S. T. King, Executive Vice President, Mason and Dixon Lines, Inc. "After exhaustive tests on our docks, after closely checking maintenance records and interviewing our drivers, we standardized on Clarks as the most practical for our operations."

Mr. King adds another reason for their choice: no other fork truck manufacturer could meet the requirements of his company with the nationwide service coverage of the Clark dealer organization. From Atlanta to New York, the Mason and Dixon Lines finds a Clark dealer close to every terminal. These Clark dealers provide maintenance coverage for

Mason and Dixon's 29-truck fleet of Clarks, and training schools have been conducted at 6 major terminals for Mason and Dixon personnel.

Mr. King concludes: "Fork trucks permit us to expedite freight and give our customers better service. There's less damage to goods, our housekeeping and efficiency are better. We benefit, but the important thing is that our customers benefit from our fleet of Clarks!"

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## Retirement Risk

**National Tube lost a suit because its compulsory policy wasn't spelled out in its union contract.**

Companies with compulsory retirement policies are checking the fine print against a new, potentially expensive decision by a federal court in Ohio.

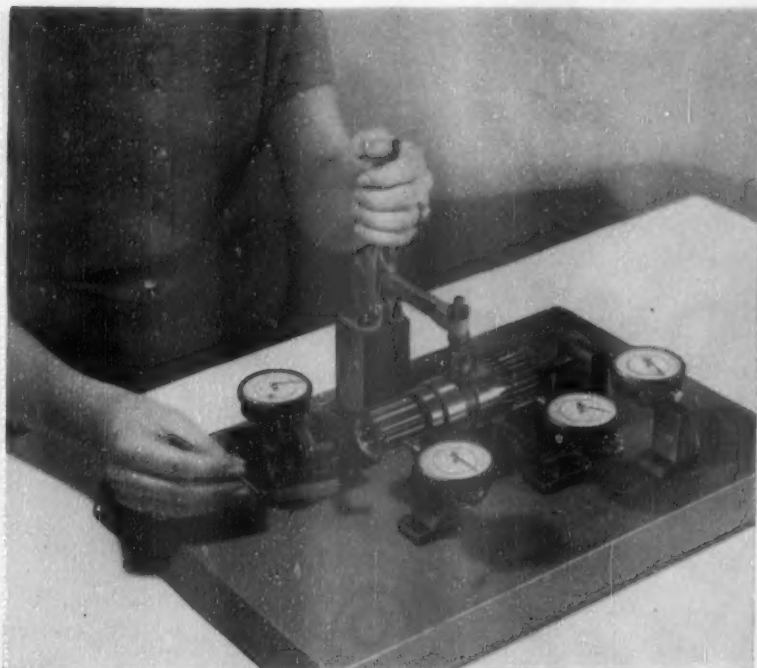
The pension decision, against National Tube Co., of Lorain, Ohio, awarded an employee retired against his will in 1946 damages amounting to \$25,000 for what the court held to be an illegal discharge. Federal Judge Paul Jones ruled that the "legal and practical effect of compulsory retirement is the same as discharge"; he decided the employee was due damages because the company's contract with the United Steelworkers (CIO) in 1946 did not specifically give the employer the right to compel retirement.

• **The Issue**—National Tube and USW negotiated a pension contract in 1949, spelling out the circumstances under which an employee can be retired—whether he wants to or not. Before 1949, National Tube had a compulsory retirement policy not covered by its USW contract. It was under this earlier policy that Sims L. Nichols, a 27-year employee, was forced to retire.

Nichols sued, alleging he was discharged in violation of USW's contract, which provided that employee job rights could be terminated only "for cause"; the complainant said that compulsory retirement under a company-established plan wasn't "for cause" in the meaning of the contract. National Tube contended that compulsory retirement should not be considered as a discharge, and that in negotiating the 1946 contract it had retained the right to retire employees.

Judge Jones's decision rested on one point: "If management desired and intended to retain a compulsory retirement practice, it should have reserved that method of termination or notified its employees of its purposes and intention of such policy," Judge Jones declared.

• **Precedent**—Most industrial pension plans are now a part of the regular labor agreement, and the employer's right to compel retirement is specifically outlined. The National Tube decision isn't likely to have any impact whatever on retirements under these plans. However, employers who still have private retirement plans and union contracts that don't mention retirement may find the National Tube decision a new cause for worry.



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PICKETS no longer bar officials and nonstriking workers from Philadelphia plant but . . .

## Philco Strike Goes On

Officials and nonstriking employees of Philco Corp. passed through picket lines in Philadelphia this week (picture), as contract talks with the International Union of Electrical Workers (CIO) resumed. Tempers had cooled since a ruckus a week ago over mass picketing stopped negotiations—but neither side appeared ready to budge at the bargaining table.

• **IUE Demands**—IUE struck Philco plants in Philadelphia and Sandusky, Ohio, two weeks ago in support of demands for a pay boost and other gains, including an annual wage, more holidays with pay, and bigger insurance benefits.

Most IUE interest appears to be in the wage demand. The union says Philco pay is 20¢ an hour less than that of competitors; it demands that a new contract include (1) a raise to end this claimed differential, and (2) an additional increase to offset raises expected from Philco's competitors.

Philco offered to renew the old contract for a year, with provision for a wage reopening at any time. The corporation argues that a wage boost isn't justified this year because of "highly competitive conditions" in the radio, television, and electronics industries. It adds that the union talk of a differential is just hokum; according to Philco, its average \$1.61 straight-time hourly pay for radio and TV workers compares favorably with wages of its

competitors. The trouble is, IUE wants to "impose" on radio and TV manufacturers the higher wage rates paid under its contracts in other, more prosperous industries, according to Philco.

• **RCA Contract**—IUE cited higher pay in the Radio Corp. of America plant at Camden, N. J., as an example of the "differential." Philco retorted that RCA workers at Camden—who make TV cameras and other telecasting equipment—are more highly skilled than Philco's Philadelphia employees. It argued that its Philadelphia rate is 17¢ higher than that paid at a comparable RCA plant at Bloomington, Ind.

While the argument was on over Philco-RCA rates, IUE and RCA negotiated new contracts providing for a 9¢-an-hour "package" wage boost under a wage-reopening clause. The RCA agreement, subject to IUE locals' ratification at meetings this week, includes a 5¢ across-the-board raise, 2¢ to correct what IUE describes as "in-equities" in some wage scales, and the remaining 2¢ for fringes.

• **Precedent?**—Undoubtedly, the IUE-RCA settlement will be discussed as Philco and IUE resume bargaining this week, but this year—with less "pattern" negotiating and more attention to company ability (BW-Apr. 24 '54, p. 34)—the RCA terms may not have a major bargaining impact.

## Harassing . . .

. . . the boss through slowdowns, long rest periods, etc., during bargaining now held violation of T-H act.

"Harassing tactics" by a union to force an employer's hand during collective bargaining violate Taft-Hartley, the National Labor Relations Board has ruled.

It's the first decision that labels slowdowns, extended rest periods, partial strikes, and other production-disrupting tactics as unfair labor practices. It's also the first to order a union to stop such activities. As such the decision is an important broadening of the board's earlier rulings that harassing tactics are not "protected" under the T-H act.

• **Alternatives**—Under the board's expanded policy:

- Workers who engage in "unprotected" harassing tactics can be discharged or disciplined. The employer can even close his plant in a lockout without calling down T-H penalties.

- A company may refuse to bargain as long as the union keeps up unprotected harassing tactics.

- The company may file an unfair-labor-practice charge against the union.

- **Precedent**—The test case for the last alternative involved CIO's Textile Workers Union of America and Personal Products Corp., of Chicago, a maker of sanitary and surgical dressings. The union contract ran out Oct. 15, 1952, but members stayed on the job. In 1953, employees embarked on a course of harassing actions designed to keep the employer off balance. According to the company brief filed with NLRB, these continued until a full-scale walkout on Sept. 2, 1953.

First an NLRB trial examiner in Chicago and later the board ruled in favor of the company—NLRB by a 4-to-0 vote. The board described as "an abuse of the union's bargaining powers" such practices as slowdowns and unauthorized extensions of rest periods, walkouts or partial strikes by portions of shifts or entire shifts, and a refusal to work specified hours or overtime.

The board also held the TWUA local guilty of "coercion and restraint of Personal Products employees."

Personal Products now recognizes AFL's United Textile Workers of America as bargaining agent on the basis of a card check. TWUA has challenged the recognition, and has petitioned NLRB for a representation election among the company's 140 employees.

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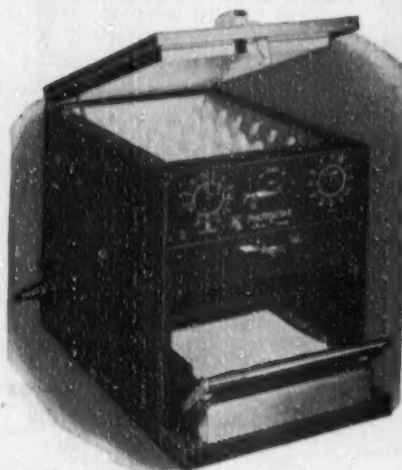
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USW PRESIDENT Dave McDonald (center) confers with vice-president James Thimmes (right) and a union aide over the Steelworkers' chances in the upcoming . . .

## Bargaining in Steel

McDonald to present a hefty batch of demands. But with production way off, his chances of repeating last year's 8½¢ increase don't look bright.

A year ago a somewhat shaky David J. McDonald sat across the bargaining table from the steel industry. He faced his first major test as new president of the United Steelworkers of America (CIO). He scored a quick and peaceful settlement.

This week, in Pittsburgh, Dave McDonald sits in the same negotiating chair again, but now as an established, highly publicized labor leader who calls steel management leaders by their first names.

What happened to McDonald in the past 12 months may hold the key to the outcome of 1954 steel negotiations. Right now, his chances of getting as much as last year seem somewhat dim.

The 14-million members of the USW presented a series of extensive demands, starting with bellwether U.S. Steel. They are asking for higher pay rates and pensions, and a guaranteed annual wage. The demands were served concurrently on the other five giants of basic steel; and whatever the settlements, they will filter down through many industrial contracts still to come.

• **Slow Times**—McDonald is in a tough spot. He's there because, at this time, the industry's massive furnaces are oper-

ating at 70% of capacity, and the union itself says some 190,000 steel workers are unemployed. Company officials see no marked change in business for some months to come.

When the 51-year-old silver-thatched McDonald brought home an 8½¢ hourly wage increase last year, steel plants were producing to the hilt. It was an easy settlement, too, because both USW members and the industry had fought through a 54-day strike in 1952 and were in the mood to come to terms.

• **UAW Figure**—Current bargaining is not expected to produce anything close to these gains. But the union feels it has a running start on a wage increase to match the 5¢ annual productivity increase coming to the United Auto Workers (CIO) at the end of the month. This, however, figures to be cut down by at least 1¢ when, at the same time, UAW contracts are adjusted to the government's falling cost-of-living indicator—a point certain to be brought up by steel company negotiators.

Steel pensions, lagging behind those in the auto industry, are figured to be raised—as are health and welfare benefits. The guaranteed wage probably

will become just a talking point for the union.

• **Score**—McDonald must gauge the sentiment of his tough unionists, hit by unemployment and cuts in overtime paychecks, on what they'll take and what they are willing to fight for. His experiences of the past 12 months will be the base of that judgment. Lately, this is what he has added to that experience:

• McDonald made an informal alliance with UMW chief John L. Lewis and AFL Teamsters president Dave Beck. This was designed, for his part, to escape from under the cloak of CIO president Walter Reuther.

• He paid a heralded visit to the White House to present President Eisenhower with the steel union's program for full employment—the only union leader to get the President's personal attention for such a program.

• He appeared on a 93-station TV hookup across the country to explain the USW employment plan. The TV outlets included all 48 state capitals.

• With U. S. Steel Corp. chairman Benjamin Fairless, McDonald toured the company's plants to promote union-management good will.

• **Payoff**—McDonald sees this tour as a boon to current negotiations. Perhaps more susceptible to personal contacts with officials in his industry than other union leaders might be, McDonald points out that his negotiating team can now address steel industry officials by their first names, and vice versa. What may be significant is the unusual move by Fairless to join the early bargaining that has been handled, in the past, by industrial relations experts.

Certainly, preliminary bargaining maneuvers have been more peaceful than in other years. Of the contract termination date—which Steelworkers have thought of as the strike date—McDonald says: "It is not proper to refer to June 30 as a strike deadline." But when the chips are down, the economics of the settlement terms are all important to both sides.

McDonald is well aware of this. But his stature as a union leader and the support he holds from rank-and-file union members affect his bargaining strength. He believes he has both.

• **Aims**—The USW strategy to get McDonald before union members and the public will be continued. He sees the first TV program as a successful venture that brought favorable comment from congressmen, governors, and, of course, USW members. He wants to transmute that approbation into personal loyalty. What he wants is the same kind of fealty that Lewis commands. His power and authority as a labor leader will be beyond challenge only when he can say strike or work, and the rank and file will respond with unanimity.

## Foreman Tussle

**Chrysler and UAW continue their tug of war for loyalty of supervisors downgraded to production jobs.**

The hot issue of supervisors who are returned to nonsupervisory jobs worked up a new head of steam this week. Chrysler broadened its counter-attack on CIO's United Auto Workers (BW—May 1'54, p138) in an effort to restrain the union's disciplinary authority over downgraded supervisors.

This is the toughest problem that has risen over management's right to manage since the move to unionize foremen withered five years ago.

Involved in the Chrysler-UAW fight is, baldly, the loyalty of foremen. If a company promotes a production employee from a unionized group to a supervisory position, the company expects him to become a 100% management man. If, however, a slack period necessitates his being returned to a nonsupervisory job and union membership, and the union asserts and exercises a right to discipline him for actions while he was a "boss," then, clearly, he'll be tempted to "watch his step" while he's in the boss's role.

• **Second Try**—Chrysler, rebuffed once in a bid for an injunction against UAW "interference" with its downgraded foremen, last week returned to court. Where, before, it had sued only UAW's Dodge truck Local 140, it now named in its complaint international UAW and locals in Plymouth, DeSoto, and Highland Park plants, along with the Dodge group.

According to Chrysler's revived court action, the other locals have pointed to disciplinary moves against two Dodge truck ex-foremen, and have warned supervisors to be careful lest they run into similar trouble—fines for "conduct detrimental to the union" while serving as foremen.

In the earlier legal proceedings, the Macomb County (Mich.) Circuit Court ruled that UAW could legally hold members accountable for acts committed during "honorable withdrawal" status; the court cited a provision in the auto union constitution as a basis for continuing disciplinary control.

• **Spreading**—At the same time, a second controversy flared into the open at Gear Grinding Machine Co., in Detroit. UAW Local 380 took disciplinary steps against a returning foreman. GGM filed a National Labor Relations Board unfair-labor-practice charge against the local—alleging it violated the Taft-Hartley ban on coercion.

UAW filed a quick countercharge,



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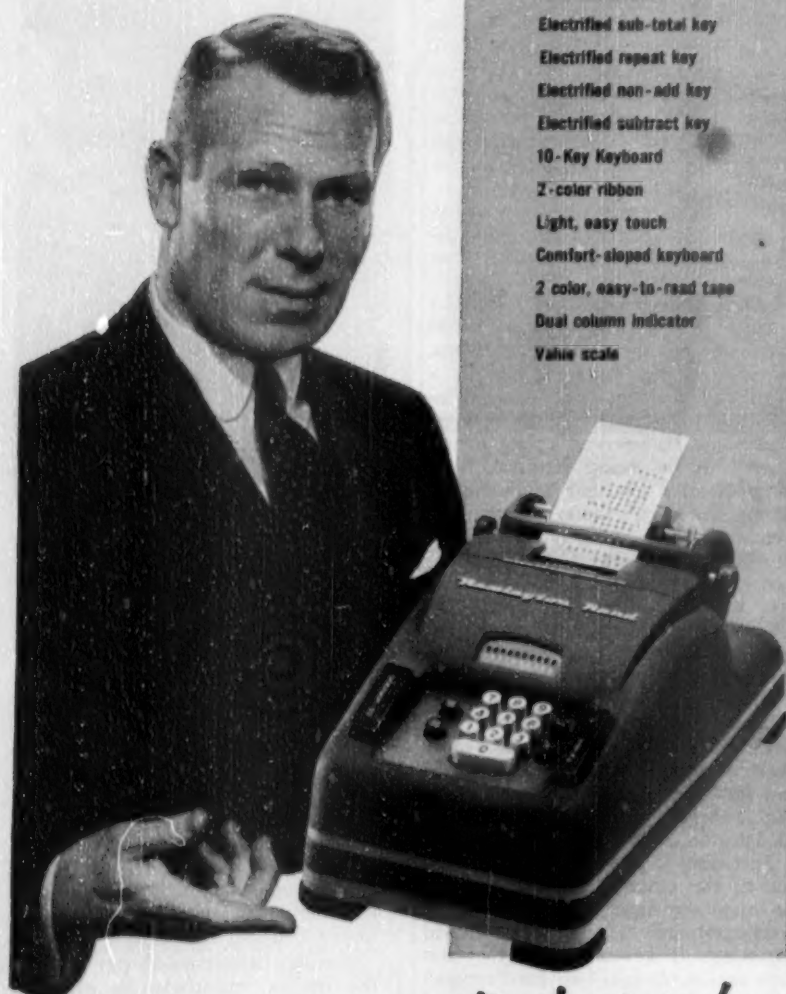
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alleging the company refused to deal with the union over the discipline of the downgraded foreman.

NLRB's office in Detroit took the charge and countercharge under advisement.

• **Nervous**—So far, only UAW has been involved in the disputes. However, employers in other industries aren't too reassured. Other unions have similar contract provisions covering the actions of members in "honorable withdrawal" status; they just haven't used them.

## LABOR BRIEFS

A presidential board last week recommended a "package" increase costing 7¢ or 8¢ an hour for a million nonoperating rail workers. No wage increase is included. The amount is spread over welfare, vacation, and holiday benefits.

• **No-raiding pact** between AFL and CIO unions that agree to be bound by it becomes effective June 9. AFL's executive council O.K.'d the agreement in Chicago last week; CIO's board had already approved the pact—even though its United Steelworkers and AFL's Brotherhood of Teamsters have refused to be covered at the start.

• **Death of Louis Stark**, labor reporter and editorial writer for The New York Times for 30 years, brought pauses in the meeting of AFL's executive council and in CIO's steel bargaining this week. The nation's first great labor reporter, and a Pulitzer Prize winner in 1942, Stark had many close friendships in labor and industry across the country.

• **No pay boosts** show up in contracts negotiated by four northern California timber employers and CIO's International Woodworkers of America, covering 1,500 employees. . . . Timber companies in Washington and Oregon have also proposed the renewal of existing wage clauses in negotiations with the Lumber & Sawmill Workers (AFL).

• **Another test** looms for leftist United Electrical Workers as the United Auto Workers (CIO) challenges UE's Farm Equipment Workers in a representation election at International Harvester's East Moline (Ill.) works on May 29. FEW has held bargaining rights at the works for 15 years. The election is being held under the National Labor Relations Board's new "schism" policy (BW—May 15 '54, p. 164).

• **Oil wage demands** will be drafted by the Oil Workers International Union (CIO) wage-policy committee on June 4.

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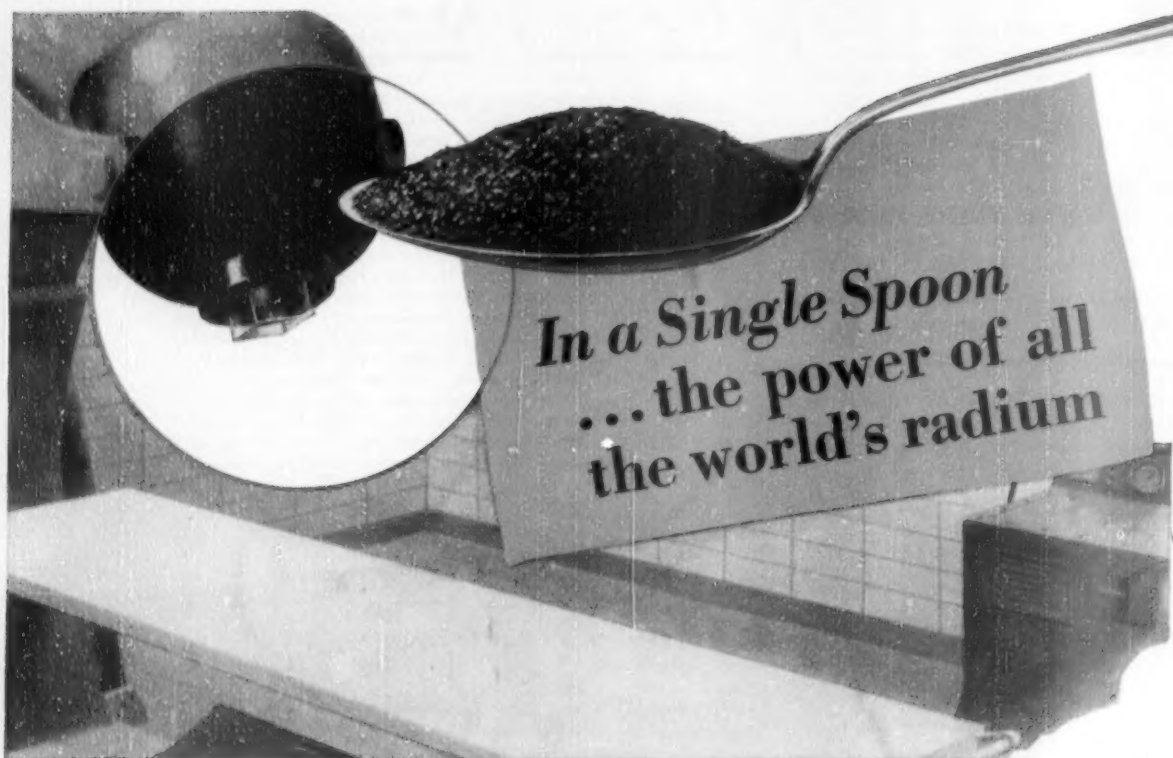
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# INTERNATIONAL OUTLOOK

BUSINESS WEEK

MAY 22, 1954

A BUSINESS WEEK

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**The Geneva Conference is nearing a climax.**

The West now demands that an Indo-China ceasefire must come before any talk of political settlement. Up to now Soviet Foreign Minister Molotov has insisted that the two must be handled together.

If Molotov doesn't yield on this point, there will be no chance of East and West even discussing a compromise. In that case Britain's Anthony Eden, who has been carrying the diplomatic ball for the West, may feel that his efforts at mediation no longer serve any useful purpose.

That, of course, would mean the end of Geneva.

Molotov probably will try to stretch things out as long as possible.

He still hopes to overthrow the Laniel-Bidault government by merely holding out vague hints to the French parliament that a different government could get a reasonable compromise in Indo-China.

In fact, though, Bidault's hand has become stronger both in Geneva and Paris.

- In Geneva, the French Foreign Minister is getting full backing from the U.S. And the British are coming closer to his position.

- In Paris, Bidault seems to have survived the fall of Dienbienphu without losing any political support. (It's Premier Laniel who's getting the blame.)

What's more, U.S.-French military talks are nearing a solution to the problem of internationalizing the Indo-China war.

These military talks in Paris may soon lead to a dramatic agreement for a new kind of U.S.-French military cooperation in Indo-China. This cooperation would be the backbone of the united action Secretary of State Dulles has been shooting for.

If and when the agreement comes, its impact is sure to be felt in Geneva. Molotov will have to decide then whether to compromise or face a Geneva breakdown.

If Geneva folds, U. S. intervention in Indo-China will become almost inevitable. However, even that wouldn't mean an end to diplomatic negotiations over Indo-China. Other conferences might easily follow.

It's unlikely that the military situation in the Red River delta will decisively influence the outcome at Geneva.

It doesn't look now as if the Communists can concentrate enough strength around Hanoi to take this key spot in a hurry.

In fact, the French high command insists that it can hold the Reds back for some months yet. French commanders say they could even stabilize the situation there if enough reinforcements were sent from France.

French military judgment has been wrong before. So this optimism is discounted in Washington and Paris. Still, neither capital really fears a sudden military disaster at Hanoi.

—•—  
**Chancellor Adenauer faces a real threat to his pro-Western policy.**

Strong forces in West Germany, including the Free Democratic members

# INTERNATIONAL OUTLOOK (Continued)

**BUSINESS WEEK**

**MAY 22, 1954**

of his coalition, want to establish official diplomatic and trade relations with Moscow.

For the moment, Adenauer has prevented such a development. But if the European Defense Community isn't ratified this year, the Chancellor may not be able to resist the pressure.

**Pressure for Bonn-Moscow diplomatic ties is coming from several directions:**

- West Germans are beginning to give up hope that the U. S. can help them get German unification.
- Germans in all parties doubt the value of German rearmament now that we have come into the H-bomb age.
- German industry wants to trade with the East, regardless of the political consequences. At the recent East-West trade meeting in Geneva, German delegates lined up tentative deals with the East totaling \$60-million. West Germany's second largest shipyard, which is state-owned, has just received a \$28-million order from Moscow; this comes on top of a \$19-million contract last year.

—•—

Moscow is starting to light brush fires in Latin America while Washington tries to control the conflagration in Indo-China.

The Communist-led strike against United Fruit in Honduras (page 166) spread this week to a string of other industries—mostly American-owned. It threatened to engulf the transportation system. Strike action clearly was being directed from neighboring Communist-dominated Guatemala. Guatemalan workers began to walk out to show solidarity with Honduran strikers.

Chilean Communists proved in a one-day walkout that they could paralyze the country (page 162).

A large shipment of Czech arms was unloaded in Guatemala. Nicaraguan authorities reported that small arms stamped with the hammer and sickle had been smuggled into the country from submarines.

The arms delivery to Guatemala could mean serious trouble. It was too large to be destined solely for the Guatemalan army. U. S. officials fear the weapons will be used to arm a Communist militia in Guatemala or guerrillas in neighboring states—or both.

The Kremlin apparently is testing the strength of hemisphere unity. Communist activities clearly aren't isolated and local. Strikes and arms smuggling in Central America are directly interrelated.

Moscow may be trying to provoke Washington into tough action to stop Communist penetration of the hemisphere. That could alienate many Latin American countries that still fear Yankee meddling south of the border.

Dulles can't afford to lose any Latin American support right now. He'll need every vote he can get in the U. N. General Assembly if he has to ask it to sanction united action in Southeast Asia.

So Washington will go slow in trying to counter Communist moves in Latin America. State Dept. would like to get tough hemisphere action against Guatemala under the Rio pact. But it won't act without strong backing from other Latin American countries.

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## BUSINESS ABROAD

# John Bull Is Back on His Feet

● Anyone can see the surface signs of Britain's recovery, but there are other, deeper symptoms.

● London is coming back as the top-dog clearing-house of the nondollar free world.

● Industry is humming, with sharper selling, more stress on modernized plants.

The British are back on their feet economically. No American who visits Britain this spring, whether he goes to London or Manchester or any British industrial center, can miss that fact.

The surface signs of British recovery—well-stocked stores, no rationing, and a new air of confidence—are plain for any visitor to see. Get a little under the surface and you can spot two more fundamental signs of economic health:

- London's comeback as an international financial center, which may soon make Britain the dominant clearinghouse of the nondollar world as it was before 1939.

- A revival of enterprise in British industry, which is showing up in more aggressive selling in world markets and in more investment in labor-saving machinery at home.

- **Convertibility?**—It's too soon to say that these two developments are solidly established.

London can't regain its real position as an international financial center as long as sterling isn't freely convertible into dollars. It will be autumn at least before Chancellor R. A. Butler decides to take the big step to convertibility. And that decision will hinge largely on what happens to the U.S. economy over the next few months.

It will be longer before you can tell whether a new spirit of enterprise has really taken hold in British industry. There's no doubt about the trend to younger and more up-to-date management. There's no doubt either that German competition in export markets has put many a British company on its toes. But the real pressure for industrial efficiency is coming from the labor shortage in Britain, which is acute again, after a slump in 1952-53. Some businessmen think that this shortage may be more or less permanent. If so, it would produce the same pressure for new machinery and better management methods that the relative scarcity of labor has created in the U.S.

ever since the time of the Civil War.

The fact is that these two developments—moves toward sterling convertibility and the trend to industrial efficiency—will reinforce each other. Convertibility, if it comes, will put more competitive pressure on British business and new investments will strengthen Britain's trading position in world markets.

### I. Comeback of a Banker

London's strong comeback as an international financial center has taken the world by surprise. In recent months funds have been pouring into London from many countries, including the U.S., for use in the reopened commodity, gold, and financial markets. Foreign banks, among them a number of central banks, have been building up their working balances in sterling. The free gold market has had the most marked success. Already it has attracted most of the world's business in newly mined gold—a business that required large funds.

In addition British Treasury bills have attracted a lot of foreign money. Until last week's cut in the bank rate—from 3½% to 3%—British Treasury bills yielded over 2%, American under 1%. So substantial funds went to London simply for short-term employment at higher interest rates. The cost of buying protection in futures markets against exchange fluctuations cut into the juicier yield in London. But at the same time, some smart operators made profits out of fluctuations in the exchange rate.

- **Likely to Stay**—The inflow of foreign funds into the London money market was the first solid evidence of London's integration into the international money market. The bulk of these funds is likely to stay in London as working capital, though it's unlikely that the recent buildup will continue.

This capital movement has contrib-

uted heavily to the rise in London's gold reserve and has helped to turn Britain's deficit with the European Payments Union into a surplus. The capital inflow accounts, more than anything else, for the present strength of sterling.

London is naturally pleased with the gradual restoration of its financial freedom and the successful steps that have been taken toward convertibility. There's a feeling that the big step to convertibility may come this fall, providing that British exports hold up, the prices of sterling area commodities stay high, and foreign funds remain in London.

London bankers look forward eagerly to a convertible pound. Led by Cameron Cobbold, Governor of the Bank of England, "The City" knows it can't regain the kind of financial strength it wants unless sterling becomes freely convertible into dollars.

- **Known Limits**—There are no illusions, though, about London completely regaining its prewar position as the provider of dollars for the European continent. No one expects London ever again to earn a big enough surplus of dollars to play this role. The biggest obstacle is the present price of gold; newly mined gold in sterling countries is now worth less than half what it was prewar in terms of commodities. Then there's Britain's wartime loss of overseas investment income and the accumulation of large sterling debts. These things limit London's resources as a provider of international finance.

Still there's no doubt that London's banks and insurance underwriters, and its commodity, gold, and freight markets are rapidly expanding their international business. What's more, as domestic savings rise, London's capital market may provide limited amounts of loan capital for countries outside the Commonwealth. With convertibility this business would be sure to expand still further.

- **Industry's Worries**—London's enthusiasm over this prospect isn't shared by many British industrialists. Industrial leaders don't care much about international finance. In fact many suspect that convertibility will expose them to heavy competitive pressures just for the benefit of the bankers. They remember the historic incident of 1925 when Winston Churchill as Chancellor and Montague Norman as Governor of the Bank of England



## A Steel Man Had a New Idea

Around the Turn of the Century the pattern of growth of American cities, together with mounting land values, gave powerful appeal to the idea of the skyscraper.

But with the steel beams of a half-century ago, construction of the skeleton for a tall building was almost prohibitively expensive.

In 1901 when the Park Row Building (26 stories) was New York City's highest, many believed that the limit had been reached. "It is very doubtful," wrote one authority, "whether it will be found either desirable or profitable to

erect other buildings as high as this."

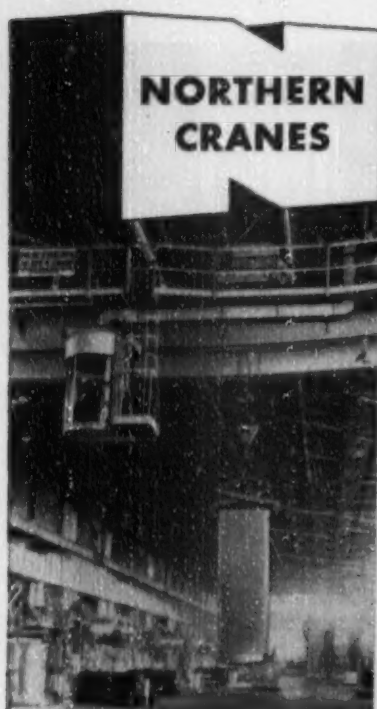
But in 1908 Bethlehem Steel came along with a new idea—rolled steel beams and column sections of a type in which the steel was so distributed that less metal was required to carry the same load. Use of the new Bethlehem rolled sections not only saved material but reduced the work necessary in the fabricating shop. These savings contributed much toward making it

economically feasible to build vertically for 40, 50, 60, even 100 stories.

Soon the new Bethlehem beams began to make their impress on the changing skyline. Today the scores of towering skyscrapers all across the land, symbols of this country's aspirations and creative energy, are built of steel beams of the type first rolled nearly a half-century ago on the historic structural mill at Bethlehem.

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returned to the gold standard with an overvalued pound, thus causing a heavy setback to Britain's export trade. This incident has been cited at many a business meeting of late.

## II. New Life in Industry

It will be the performance of British industry that determines, over the long haul, whether or not Britain can maintain the strong financial position that the bankers so confidently look forward to. From this angle there are some encouraging signs in Britain today.

For one thing, private industrial investment remains high. And for the past year it has been going mainly into modernization of production methods, whereas most of the early postwar investment went for repairing war damage, for replacing completely obsolete equipment, or for expanding existing production facilities. The new trend is especially marked in the Birmingham area, the chief center of Britain's metal-working industries. It's true of many medium-sized firms as well as the big ones. (Big British companies like Imperial Chemical Industries, Unilever, and the big motor manufacturers have been investing heavily since the war.)

• **Labor Shortage**—The combined impact of a labor shortage and high wages is pushing British industry to invest in labor-saving machinery and to update its management methods.

In the Birmingham area today there are three jobs open for every job applicant. In highly skilled categories, the ratio is 9 to 1.

Or take the impact of wage increases. Recently the big British union in the metal-working trades got a wage boost after prolonged negotiations and bitter opposition from management. But by the time the increase came through one group of companies that produces electrical equipment had made production changes that more than offset their increased wage cost.

• **Money Spreads**—You can't ignore the changing consumption pattern in Britain, which has been stimulated by rising wages and the equalization of incomes. In terms of the mass market, it is coming more and more to duplicate the U.S. pattern. Here's one example of what's happening: A new coal pit in the Midlands, where faceworkers earn about \$60 a week, or well above the industrial average, was provided with sizable bicycle stands and a small car park. Today the bicycle stands are half empty and the car park is overcrowded.

There is a definite trend toward younger management in British industry. Until the end of World War II, most British companies were run by men in their sixties. That was partly because of British conservatism and partly because the 45-55 age group had

been largely depleted by World War I. Today you will find many a British company run by a management group whose average age is under 45. These younger executives are the ones who are taking an active interest in the growing number of management courses that are being given in Britain today.

• **The German Bogey**—The threat of German competition in export markets—and these are as important to most British companies as the home market—tends to reinforce the trend toward more efficiency in British industry. True, some British industrialists moan about unfair German competition and some talk of getting around it by special trading arrangements. But German competition has proved a useful stimulus to British industry as a whole.

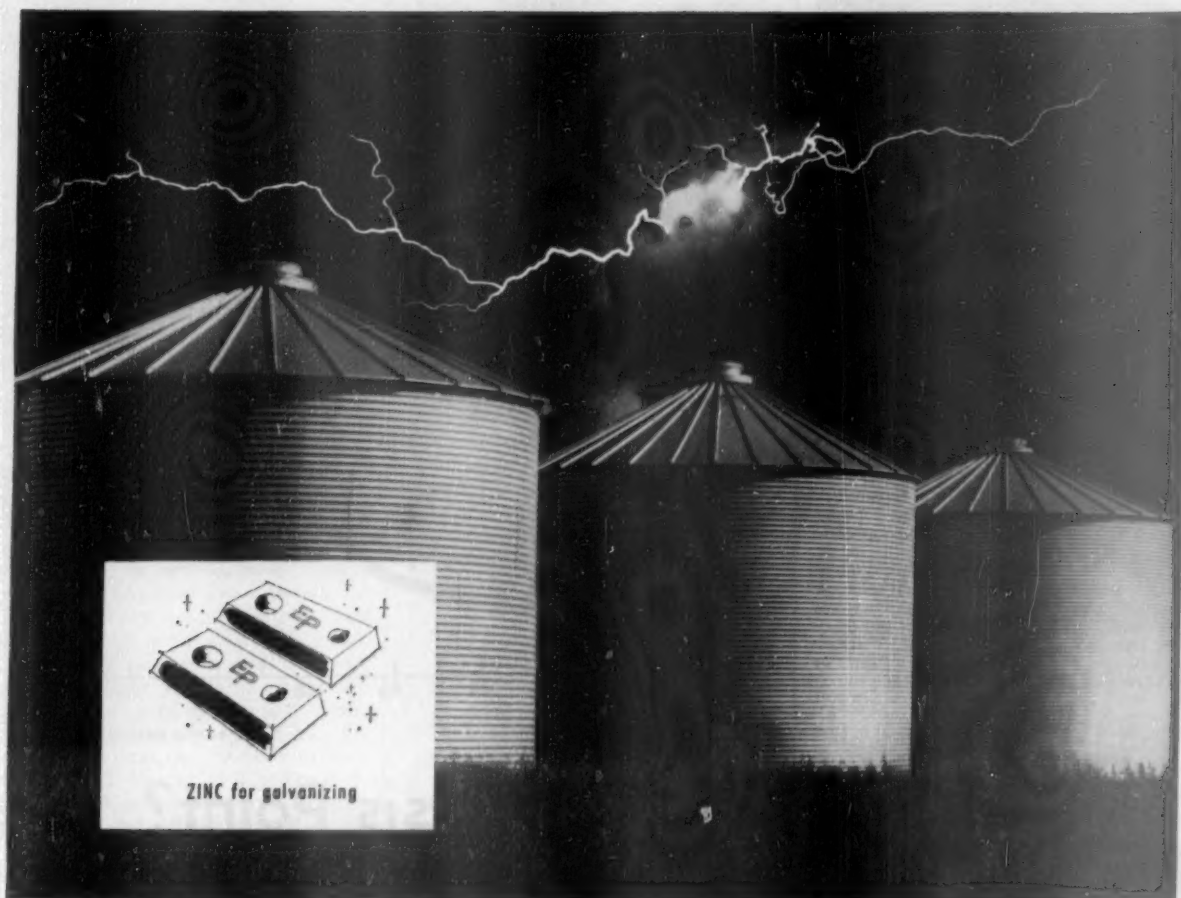
## BUSINESS ABROAD BRIEFS



Alcide de Gasperi (above), former Italian premier, was elected to a tough job this week as President of the Assembly of the European Coal & Steel Community. The coal-steel pool just got a \$100-million loan from the U.S. (BW—Mar.27'54,p134) but its ultimate fate still hangs on French ratification of the European Army, due for a vote soon.

• **Another U.S. company**, American Overseas Oil Co., is getting set to hunt for oil in Turkey. Prospecting permission was granted by the Turkish government this week. Socony-Vacuum already is in the hunt.

• **A Czech-owned steel mill**, ordered here before the Communists took over Czechoslovakia, was sold this week to Argentina by the U.S. Treasury for \$9-million. Delivery of the mill, which originally cost \$16-million, was held up by the U.S. after the Communist coup in 1948.



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'50

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BUSINESS WEEK

(1st quarter)

## Is It the Crisis Point?

A one-day general strike this week crippled Chile's economy by slowing down transportation and shutting down copper and coal mines. Led by the Communist-tainted Central Labor Union, the walkout pitted the strength of Chile's leftist forces against the regime of President Carlos Ibanez del Campo.

The immediate issue was a demand for release of a CLU leader jailed for a May 1 speech attacking the Ibanez government. But the larger issue, which gained the CLU its greatest support among the workers, was the demand that wages be adjusted to keep pace with the soaring cost of living (chart). That brought the focus on the real trouble besetting the Chilean economy.

• **Austerity?**—It seems to be generally agreed that since the war Chile has been living beyond its means—on borrowed time. Now it's beginning to look as if the inflation-ridden Chilean economy might bring down upon itself a ruthless austerity program.

That could produce a severe reaction in the country. But many Chileans—and foreigners who do business in Chile—believe that tightening the belt is now the only hope for stability. At best, they see difficult times ahead.

That will mean (1) slimmer sales for American exporters who sell in the Chilean market; (2) increasing pressure

on foreign investors in Chile—especially on the giant U.S. copper companies operating there; (3) belt-tightening for the Chileans themselves.

The big question mark in Santiago now is not what kind of economic medicine is required. Most people there agree that Chile needs a stiff dose of deflation, but they aren't sure whether Chileans will swallow it. There are already signs that it won't go down without a struggle. The strike was a forecast of the reception an austerity program would meet from Chilean workers.

• **Vacuum**—Chile's political picture, like the economic, appears dark to these Santiago observers. They see a leadership vacuum at the top—with the Left making a determined bid to fill the void. Outside investors are beginning to wonder whether the government of President Ibanez can set Chile's house in order before the Left undermines it completely.

Chile today can claim Latin America's lustiest inflation. The cost of living—up 10 times over World War II—has increased some 70% in the past 12 months alone. Food prices jumped 14% in the first quarter of 1954. Money in circulation—much of it hot off the presses—is three times the 1949 volume. And while the government sticks

to an official rate of 110 pesos to the dollar, the free market rate is 320 to 1.

This inflation hasn't brought popular squawks because the government has seen to it that pay increases have kept pace with the spiraling cost of living.

• **Disparity**—Adding to Chile's inflation is its social welfare program—one of the most thoroughgoing in the world. Payroll contributions sometimes amount to 34% of the paycheck for employers and 13% for employees. Many men in their prime—30s and 40s—are able to claim pensions equal to full salary when separated from a job, then go out and get another job.

Production and productivity haven't kept anywhere near the pace of wages and social benefits. That disparity is also adding to Chile's troubles now that the cushion provided by past boom copper sales is wearing thin. Supplies of some foods are running low, and winter, which comes in June south of the equator, is near at hand. Stocks of essential imported raw materials are also being drawn down. These facts all seem to add up to serious trouble ahead.

• **Copper**—What has kept all this from causing trouble sooner has been the world's big demand for Chile's copper. The red metal has carried Chile for the past 20 years, just as the country's rich nitrate fields carried it before that. The gradual decline of nitrate through the 1920s and 1930s was offset by Chile's emergency as the world's second largest, and lowest cost, copper producer. Anaconda Copper Mining Co. and Kennecott Copper Corp. have plowed millions of dollars into Chile, and shipped thousands of tons of copper, mainly to the U. S. They are far and away Chile's number one source of dollar—and peso—income.

But while the copper companies have had a relatively free hand in exploiting Chile's greatest natural resource, Chile has insisted that they pay for the privilege. That meant piling on top of a high wage outlay a sizable tax bill—regular levies, import duties.

• **Downgrade**—Korea sent copper prices soaring, and until last year strong copper prices kept the system going with profit for all, despite the rising cost structure of the copper industry. But now, with softening prices and lessening demand, the industry sees trouble coming. Chile's continued refusal to sell except at a premium price resulted in higher heaps of unsold stock; but it wasn't until these mounted to 170,000 tons that Chile gave in and allowed sales at the going world market price. There have been few takers, though. While the U. S. has agreed to buy 100,000 tons for its strategic stockpile this year, few believe that will bring more than a temporary respite.

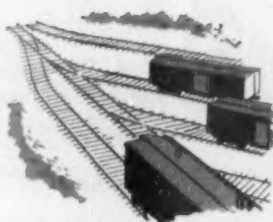
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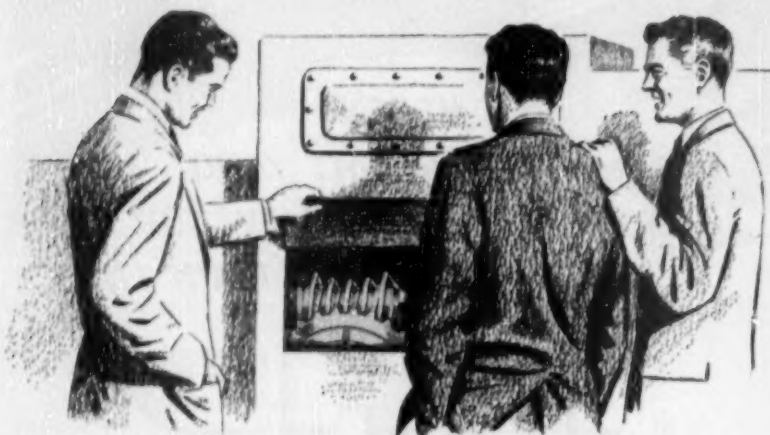
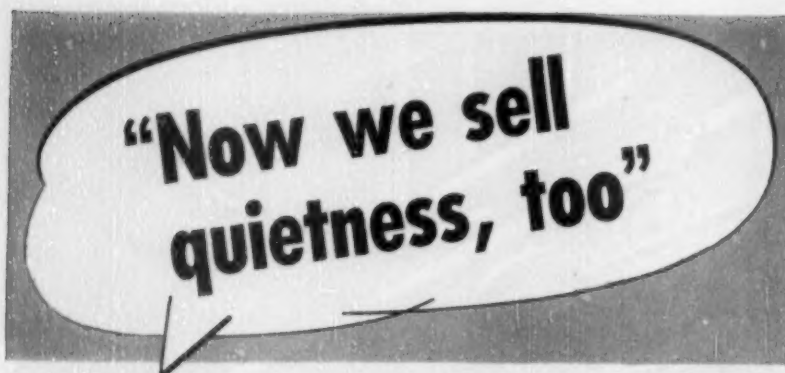
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believe a newly proposed code, designed to lighten the tax and foreign exchange burden of the copper companies, will help much. The draft law is still in Chile's congress. It is expected to come out soon, but there's fear that it will be severely watered down in the present political atmosphere.

The present trend is seen by some—copper men among them—as the beginning of the decline of Chile's copper industry. They cite expanding, low-cost production in Central Africa (BW—Jan. 23 '54, p116), new and promising ore deposits in Peru—and the lack of anything but urgently needed house-keeping investment in Chile itself.

Chileans profess confidence that the well-advertised future needs of the U. S. for imported copper are certain to keep Chile in business for years to come.

• **Fomento**—But Chileans do realize that their economy badly needs diversification. For that reason, they set up in 1939 the Corporacion de Fomento de la Produccion—a government entity that was to use a rotating fund to join up with private capital to spark economic development.

Fomento has had a good reception in the U. S. It has received over \$100-million in Export-Import Bank loans, much of that amount for Chile's steel industry at Huachipato. Fomento has also poured money into the government's oil monopoly, an electric power agency, irrigation schemes, and a rash of industrial projects from textiles to beverage plants, most of them wholly or partly government-owned.

Fomento has gained a reputation for integrity and good management; but many in Santiago now express the fear that it is drifting into the arena of politics. They point out that instead of selling its share of industries to domestic private capital as originally planned, Fomento seems to be moving in more and more into Chile's economy.

• **Investment**—In Fomento's defense, Chileans say there's not a great deal of local private capital ready to go into low-yield, long-term investment projects. Others say the belief that Fomento is heading into competition with private enterprise doesn't encourage domestic capital to go to work—or foreign capital, either. Nor do they see much comfort in the Ibanez government's way of dealing with inflation.

Chile's current economic plight is tied closely to its political troubles. The country has some 38 political parties of all shapes and hues, but without strong leadership.

President Ibanez, an army general, was overwhelmingly elected to office in 1952. Chileans were looking for a sturdy, nonpolitical regime that might clean house. But Ibanez has appeared loath to take any action and has tried to keep everybody happy.



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## Damper on East-West Trade

FOA reports that, despite changes, Russian policy is still basically antitrade . . . Honduran banana strike looks like it was planned by Guatemala Reds.

Big increases in East-West trade in the near future are ruled out—despite the continuing Soviet trade offensive—by the Kremlin's dogged adherence to its traditional policy of economic self-sufficiency and forced industrialization. That's the main conclusion of a report made to Congress this week by Harold Stassen's Foreign Operations Administration.

• **Western Hopes**—Coming on top of the recent disappointing East-West trade conference in Geneva (BW—May 15'54,p142), the report further dims Western traders' hopes that demands of Russian consumers for a higher standard of living would force the Kremlin to expand peaceful trade with the West.

These hopes have been fed by a number of recent developments. Soviet imports of consumer goods apparently have increased somewhat in recent months. Moscow has signed a slew of trade pacts in the past year and now has agreements with more Western countries than at any time since the end of World War II. Allied strategic controls on East-West trade are in the process of being relaxed.

• **Hard Facts**—All this will have only a marginal effect upon the volume of East-West trade, though, in FOA's opinion. Increases in Soviet purchases of consumer goods abroad haven't been large. And they have been offset by a continued decline in imports by Soviet satellites. Add to this the continued Russian emphasis on heavy industry and defense and it looks as though the Kremlin will let up on the Soviet consumer just enough to maintain his working efficiency and no more.

Moreover, the evidence so far suggests that a large part of the trade authorized in present agreements won't take place. Greece, for example, has received almost no goods from the U.S.S.R. under the \$20-million agreement signed last July.

Relaxation of Allied strategic controls will not be drastic and FOA doesn't expect it to have much effect on total volume of trade. The basic barrier is not controls on either side but the fact that the Soviet bloc is diverting such a large slice of resources to rapid industrialization that it hasn't much left to pay for imports.

This chronic payments problem shows up clearly in the changed pattern of Soviet exports. Exports of strategic commodities like manganese, chrome,

oil, and gold—which had practically disappeared from Russian export lists—have climbed steeply in the last year. But these sales don't herald a corresponding increase in Russian imports. They only just about cover the drop in traditional grain and timber exports and in reparations payments from Finland and credits from Sweden, according to FOA.

• **Trade Weapon**—Despite the dim outlook, FOA did find that Moscow is trying to tighten economic bonds with Latin American and South Asian countries for political reasons. The Kremlin has made unprecedented offers of developments loans and technical assistance to countries in both places. It has invested big money in lavish trade fairs. Its new trade agreements with India and Argentina—both on uneasy terms with the U.S.—call for relatively large Russian exports of capital goods normally imported by the U.S.S.R.

## Banana Battle

United Fruit Co.'s banana empire—already harassed in Guatemala, Costa Rica, and elsewhere in Central America—is now under fire in Honduras.

The company's plantations have been hit by a strike over wage demands that has halted almost all operations. The other big U. S. company on the scene—Standard Fruit Co. of New Orleans—is caught in the same fire.

If the crippling walkout continues much longer it could make a big dent in the profitable operations of the two U. S. companies.

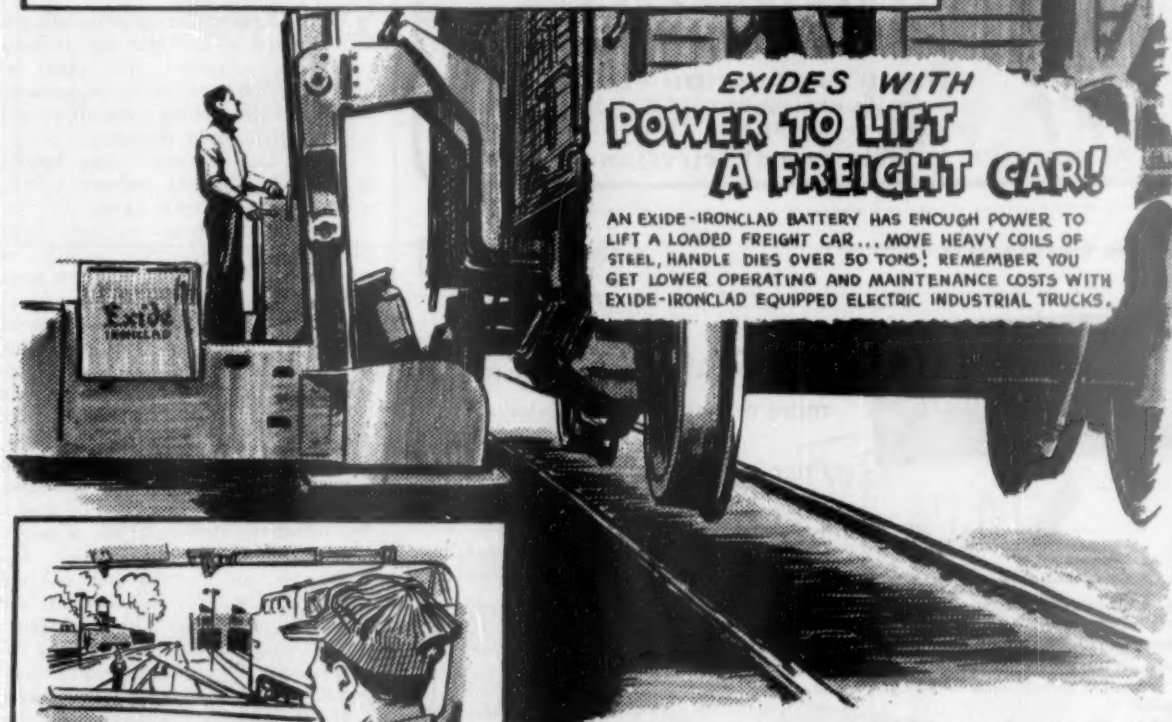
• **Paradise Lost**—Up to now, operations in Honduras had been relatively safe—as well as moneymaking—amidst labor unrest and Communist agitation in neighboring countries. The two U. S. companies dominate Honduras' economy—Unifruit employs 25,000, Standard Fruit, 11,000. Their combined payroll reached almost \$25-million last year. The labor situation made Honduras an employers' paradise. There were no unions and little labor legislation beyond some paper governmental machinery for settling labor disputes. The President of Honduras formerly was Unifruit's lawyer in the country.

Unifruit and Stanfruit carefully nourished this desirable position by paying higher than average wages, and providing good housing facilities.

Unifruit had invested millions in the

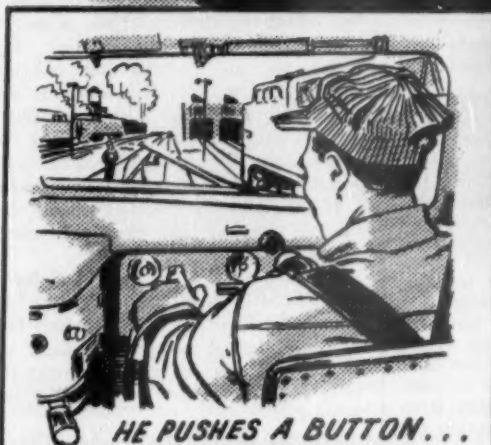
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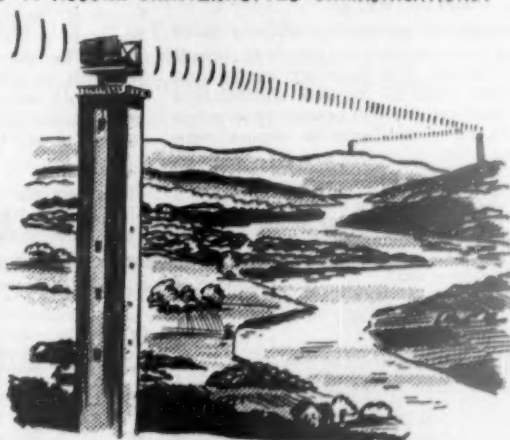


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[ SEEN CLUES LATELY? ..... Turn to Page 190 ]



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country, and was getting a big return. This month the company would have shipped 225,000 stems of bananas weekly to the U. S., valued at around \$1.4-million per week.

But at the end of last month Unifruit employees suddenly started to walk off their jobs, and by last week some 35,000 employees of both U. S. companies were on strike.

• **Well Organized**—Company officials were amazed to find that the workers, completely unfamiliar with union organization and collective bargaining, suddenly formed strike committees and imposed rigid strike discipline.

Wage increase and fringe benefit demands were almost uniform: a 50% wage increase in most cases.

The strike appears to have been planned and blueprinted months in advance by expert union agitators from outside. The finger points directly at neighboring Communist-dominated Guatemala, which has been expanding its operations in Central America. Apparently agents were slipped across the border without detection before the current outbreak.

• **Prospects**—When the strike started Unifruit said firmly it would not negotiate until strikers returned to work—but found the strikers just as adamant.

The Honduras government was caught in an embarrassing political situation. On Oct. 10, Honduras will elect a new president. Three candidates are vying for the office. Under the circumstances no candidate would jeopardize some 50,000 votes by taking Unifruit's side. Nor would he risk the ire of the still dominant American company.

Late last week, Unifruit backed down, and agreed to negotiate. Stanfruit had done so earlier. Both companies face the fact that if spraying of their banana plantations is neglected over the next two weeks, they'll be hit by leaf fungus.

Barring successful Communist pressure to continue the strike, it's likely Unifruit will lead the way to settlement by increasing wages within the week.

However, Honduras now has a labor movement, apparently under sway of the Guatemalan Communists.

The Pictures—Boeing Airplane Co.—29 (top); Henry G. Compton—80, 81, 82; Bill Clinkscales—Cover, 178; Elgin National Watch Co.—99; I.N.P.—27 (lt.); Bob Isear—150; Bern Keating—46, 47; Lockheed Aircraft—106; Marshall Lockman—128, 129, 130; Chas. Rossi—100; U.P.—30 (bot. lt.), 30 (bot. rt.), 148, 160; U. S. Rubber Co.—108; W.W.—27 (rt.), 29 (bot.), 30 (top), 30 (lt. ctr.), 122.

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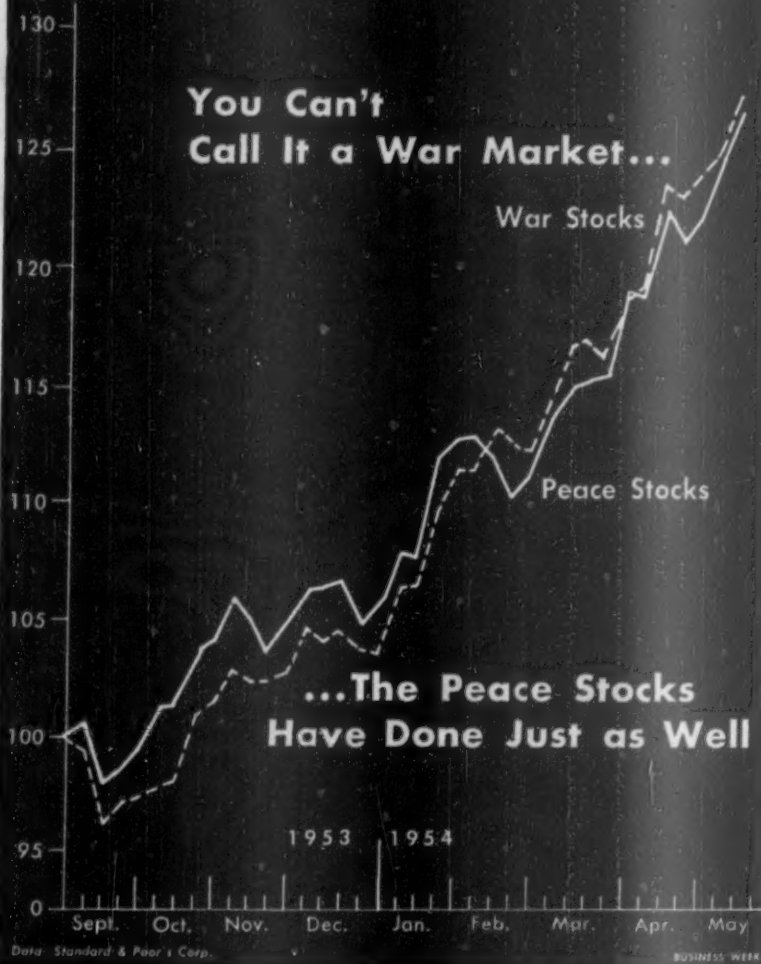
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offer you the only competition you can find in the Addressing Machine industry. Consult your yellow telephone book or write to The Elliott Addressing Machine Co., 151E Albany St., Cambridge 39, Mass.

"blue"—Is the standard advertising section of BUSINESS WEEK. Write for information.

## THE MARKETS

Sept. 2, 1953 = 100



## Both Are Breaking Records

The chart above demonstrates two truths. First, stock market prices have been climbing steadily and fast since the 1953 lows of September. Second, peace stocks have climbed just as steadily and just as fast as war stocks. Many Wall Street experts say that this punctures the theory, held by some observers, that the uptrend is based on expectation of war.

• **Breakdown**—Early this week, there was a good deal of strength in aircraft and steel shares. These shares belong in Standard & Poor's "war stocks" index, along with coal, copper and brass, lead and zinc, machine tool and machinery, metal fabricating, oil, railroad equipment, and shipbuilding stocks. These are industries that could be expected to profit during a war—either a

big one or a local one on the Korea pattern. If investors expected a war, they would probably tend to favor industries in this list.

But investors show no particular preference for war stocks. They have also been buying shares of the giants with big peacetime markets—General Motors, for instance, and International Business Machines. Stocks of both these companies have been hitting all-time highs.

They belong in the S&P's "peace stocks" index, along with automobile, building materials, confectionary, metal container, office and business equipment, finance, and U.S. gold shares.

As the chart shows, peace and war shares have climbed neck and neck—respectively 26.7% and 27.2% from



## THE PACKAGING SYSTEM

**THAT** *increases the unit purchase*



THROUGH attractive, convenient Dacam cartoning, the purchaser is pressed to take four to six units rather than one or two. This space-saving packaging system has proved its case—for products as different as ale, beer, canned milk, dog food, frozen juices and motor oil.

With Dacam machinery, as many as 9,600 flat or cone-topped cans are packed per hour! To match this speed, a quick-setting adhesive was required.

"At the inception of the Dacam program," wrote Mr. Grover C. Currie, Vice President, Dacam Corporation, "we asked Arabol to develop an extremely quick-setting, water-resistant adhesive with the binding qualities to hold together a carton of relatively heavy merchandise. Arabol successfully developed such an adhesive. This adhesive is now referred to as Dacam No. 2 and is recommended by us for use in our equipment."

Packaging is one of a hundred industries in which Arabol is privileged to serve the leaders. In 69 years of

pioneering, more than 10,000 adhesives formulas have been developed in our five laboratories. Our experience covers adhesives for every type of machinery—including the most modern. Yet we firmly believe that there is only *one* adhesives formula that can serve you best in any particular application. The cost of the finest adhesives can hardly exceed 3% of your total packaging costs. So, just as surely as you use adhesives to make, label, package or ship your product, you can afford adhesives made to your specifications.

• We invite the opportunity to submit samples for you to test in your own plant—under your particular working conditions—for your specific requirements, whatever their nature. That is the one kind of testing that assures you of satisfactory results. Your inquiry to Dept. 98 will bring a prompt response.

### THE ARABOL MFG. CO.

... a nationwide organization serving major users of industrial adhesives

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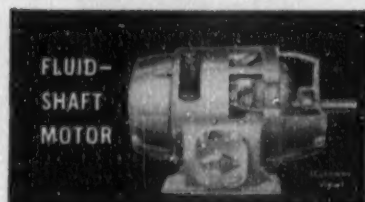
*Adhesives?*  
**ARABOL!**

69  
YEARS  
OF  
PIONEERING



# motor design problem?

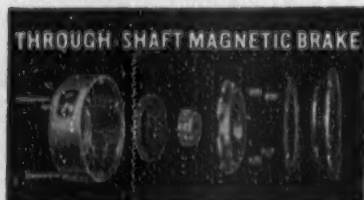
...maybe one of these  
**REULAND "specials"**  
will solve it!



**FLUID-SHAFT MOTOR**  
Motor with internal fluid coupling. Provides smooth load acceleration. More compact than separate motor and coupling. Assures perfect alignment. Will start heavier loads than standard motors of same horsepower. Used on cranes, conveyors, mixers, etc.



**RIGHT-ANGLE MOTOREDUCER**  
Consists of Reuland motor and worm gear reducer. Provides unlimited mounting versatility. Permits use of 1 high speed and 2 slow speed power-take-off shafts, if desired. Ideal for designing into cramped quarters. Also available with Fluid-Shaft drive motor.



**THROUGH-SHAFT MAGNETIC BRAKE**  
"Doughnut" type design allows extension of shaft entirely through brake. Permits use of TWO output shafts per motor. Can be mounted on the input or output shafts (or both) of Fluid-Shaft motors and motoreducers. Only 6 major parts... self adjusting... half usual length.

**OVER 890 SPECIAL ELECTRIC MOTOR DESIGNS**  
There is a good chance the Reuland "library of specials" contains a unit already tailored to your needs. Its availability will save development work and put you in production faster.

Write today, outlining your particular problem. No obligation, of course.



**REULAND**  
ELECTRIC COMPANY

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DISTRIBUTORS IN ALL PRINCIPAL CITIES

the levels of September. Both indexes are at record high levels.

Many Wall Streeters explain the phenomenon this way: Investors are buying the better-grade war shares because they feel that, regardless of what happens in Indo-China or elsewhere during the year, U.S. government spending for military equipment will not be cut back—and may even be increased. Investors are buying the top-grade peace shares because they foresee another long-term rise in peacetime industrial activity, beginning when the current recession chill thaws.

• **Blue Chips Only**—Despite the apparent bullishness of the market, however, there are many Streeters who can look at the climbing S&P's indexes and scowl. These men point out that the climb has been confined to about 30% of the stocks listed on the Big Board.

The remaining 70% have lagged behind. Some are at or near 1954 lows; others have failed to make up the losses they sustained during the 1953 drop from the highs of the celebrated "Eisenhower market."

Hence, a Streeter's state of mind today depends largely on whether his holdings are concentrated among the 30% or among the 70%.

• **Unruffled**—Not even holders of the 70%, though, will deny that the market is level-headed. It has taken day-to-day news in stride, without panicking.

As the chart on page 170 shows, there was no nervous reaction among the war shares when French forces ran into trouble at Dienbienphu, or when the fort fell. And the high-grade peace shares have been climbing right along, in the midst of a much-headlined recession.

## First-Quarter Dividends: Highest Ever

First-quarter dividends paid by corporations listed on the New York Stock Exchange totaled \$1,517,852,920, a record high for the period. Of 1,068 corporations listed, 843 paid dividends in the first quarter, for a total 11.2% above the 1953 quarter.

This year, 272 corporations paid higher first-quarter dividends than they had in 1953. The biggest gains by industry groups were: aircraft 100.6%; amusement 79.3%; retail trade 51.7%; railroad and railroad equipment 26.6%.

Two main reasons accounted for the large payments in the face of nearly nine months of declining business activity:

• Many companies held up last-quarter dividends until the first quarter of this year so shareholders could take advantage of the lower tax rates now in effect.

• The death of the excess profits tax allowed many corporations to show strong earnings in the face of lowered sales.

Stock Group	No. of Issues in Group	No. of Dividend Payers	Higher	Same	Reduced	Estimated Dividends (In millions)		% Change 1954 vs. 1953
						1954	1953	
Aircraft.....	26	15	7	6	3	\$17.9	\$9.0	+100.6%
Amusement.....	24	19	11	8	1	16.6	9.3	+79.3
Automotive.....	70	52	8	39	10	129.2	135.4	- 4.6
Building trade.....	30	24	11	12	3	14.1	13.0	+ 8.5
Chemical.....	86	72	20	49	3	152.6	137.8	+10.6
Electrical equipment.....	23	18	7	11	1	45.6	36.7	+24.7
Farm machinery.....	7	6	..	1	6	13.0	17.9	-27.6
Financial.....	33	22	9	12	2	32.4	30.9	+ 4.4
Food products, beverages....	68	55	15	35	8	54.0	46.8	+14.6
Leather, leather products....	9	7	1	6	..	5.5	5.4	+ 2.4
Machinery, metals.....	107	88	33	53	6	55.8	47.6	+17.2
Mining.....	40	26	9	12	6	50.9	47.3	+ 7.1
Office equipment.....	10	10	4	2	4	8.3	8.9	- 6.5
Paper, publishing.....	37	32	15	15	2	30.5	24.2	+24.8
Petroleum, natural gas.....	51	46	12	34	..	234.1	230.8	+ 1.3
Railroad, railroad equipment.....	81	52	16	36	1	90.4	71.4	+26.6
Real estate.....	10	7	3	4	..	3.6	3.5	+ 1.5
Retail trade.....	71	59	14	38	9	103.2	68.0	+51.7
Rubber.....	9	9	3	5	1	13.7	12.9	+ 5.7
Shipbuilding, operating.....	10	8	3	5	1	4.0	3.4	+17.6
Steel, iron.....	37	28	8	19	3	67.7	54.3	+24.6
Textile.....	44	32	7	22	8	17.5	17.8	- 1.5
Tobacco.....	15	13	4	8	1	27.4	23.7	+15.3
Utilities.....	106	99	46	53	1	273.4	240.9	+10.4
U. S. companies operating abroad.....	24	13	1	7	6	12.4	15.4	-20.0
Foreign companies.....	17	12	..	10	3	32.4	33.0	- 1.8
Other companies.....	23	19	5	13	2	11.4	10.3	+ 2.7
<b>Totals.....</b>	<b>1,068</b>	<b>843</b>	<b>272</b>	<b>515</b>	<b>91</b>	<b>\$1,517.8</b>	<b>\$1,356.4</b>	<b>+11.2%</b>



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*Makers of the Mighty Thunderbolt · Thunderjet · Thunderstreak*

# PERSONAL BUSINESS

BUSINESS WEEK

MAY 22, 1954

A BUSINESS WEEK

SERVICE

Don't overlook the important effects of the proposed tax bill on your family tax picture. This is another area where the new law would brighten things considerably.

Here are some of the reliefs that now have a good chance to weather Senate changes:

- Present law allows no dependency exemption if two or more people contribute to the support of a third, but none gives more than half of that support.

That would be changed to allow one of the contributors each year to claim the dependency—provided he has given a minimum of 10%, and all together have contributed more than half the support. The other contributors must agree that he has been selected to take the exemption.

- Now you can claim only close relatives as dependents. That leaves out cousins, foster children, and even children awaiting your adoption.

The new law would let you claim a full \$600 exemption for anyone to whom you give more than half support—if he (1) makes less than \$600, (2) lives with you, (3) is a member of your household.

- Dependent children under 19 (over if attending school full time) would be able to earn more than \$600 and still be claimed as your dependents. Moreover, they also get a \$600 exemption, so their own tax rate would be low.

- Right now, scholarships count as support. Their value might be enough to wipe out your exemption for your child's support, thus costing you the tax on the \$600 for the dependency credit.

Under the new law, no scholarship would count in figuring whether you have contributed more than half of a child's support.

- There would be a break for the unmarried head of a family in the new law. The old one gives heads of households only half the break it gives to married couples via the joint return. Moreover, to get even that break, he must have his supported relatives live with him.

The new law would allow him to split his income the same way as married people. He gets the break if he gives more than half support to a son, daughter, mother, father, sister, or brother. And none of them would have to live with him.

Note this, too: Two people supporting parents could both qualify as head of a family. Thus if a sister and brother both contribute to the support of both their parents, they could arrange it so one supports the father, the other the mother.

Aside from dependency, the new law contains several other family-connected changes. Here are some of them:

- Fix-up costs of personal residences to get a higher selling price would be eased. Say you sold a home for \$15,000, bought another for \$14,000. Under present law, the \$1,000 difference may be taxed as a gain—even though you had to spend that much in repair costs and commissions to get \$15,000.

The new law would allow you to offset sales commissions, as well as

# PERSONAL BUSINESS (Continued)

BUSINESS WEEK

MAY 22, 1954

fix-up costs if made **within 90 days** of the sale. That cuts the amount you have to reinvest **in order to avoid** the tax on the gain.

- **Tenant-stockholders in cooperative housing developments would get the same break as stockholders in cooperative apartments.** This means they can deduct their share of interest and taxes the same as apartment stockholders.

- **You would be able to take charitable deductions that run as high as 30% of your adjusted gross income.** (The limit now is 20%.) But note that 10% must go to schools, churches, or hospitals—if you use the full 30%.

- **Tax declaration penalties would be eased considerably.** Now the estimated tax you pay has to be at least 80% of your final tax—unless you estimate tax payments on the basis of your previous year's income.

You would avoid penalty under the new law when you file estimated tax at the lowest of: (1) last year's tax; (2) tax based on last year's income; (3) 70% of your annual income as you figure it during the year.

—•—  
**Be on the lookout for springtime rackets.** Better Business Bureau warns that this is the season when fly-by-nighters flourish most.

Your immediate concern should be bootleg poppies. During the official Buddy Poppy campaign (May 24-30), phonies deprive the legitimate charity of a lot of needed money. One tip-off: **The professional operator will probably ask for a fixed amount for your donation; the volunteer won't.**

Also, if you have any suspicion, don't be afraid to ask to see credentials. Every genuine volunteer is glad to show them.

—•—  
**Beware of the procession of itinerant "specialists" in home-and-garden repair, pest control, tree surgery, septic-tank cleaning, and the like.** They will take your money and give you little in return.

Watch especially for fake humus. It consists of oil-dipped sawdust with just enough leaves and decomposed vegetable matter to pass casual inspection. If used, it will set your gardening and landscaping back on its heels.

And if you are offered a "bargain" in cordwood, remember that a cord measures eight by four by four feet when the logs are stacked parallel. A favorite trick is to stack the wood criss-cross to make the pile look bigger.

—•—  
**Note for your calendar: You must file a new withholding certificate by June 1 if there has been a change in the number of your exemptions, reducing the amount of your withholding.**

—•—  
**Parakeet owners need not be alarmed over rumors of epidemics of parrot fever (psittacosis).** Cases are rare among human beings. And both birds and humans who have it respond to treatment by antibiotics.

The disease comes from a virus carried not only by birds of the parrot family, but by many domestic birds as well—such as pigeons, ducks, and chickens. In the human, it produces symptoms of a pneumonia and fever; in the birds, a ruffling of feathers and a loss of appetite.

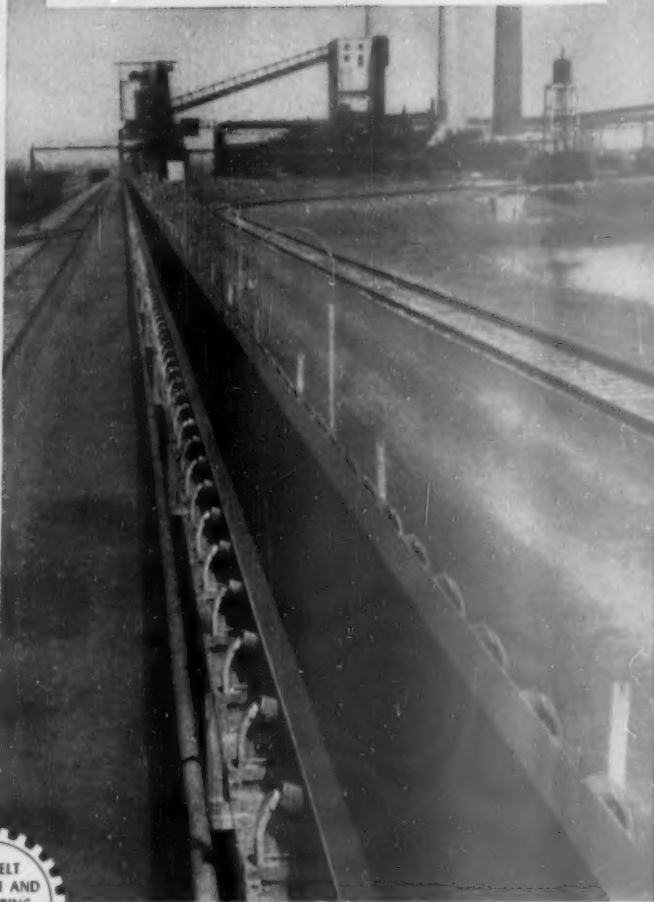
—•—  
**Note for sportsmen: The latest editions of the Fishing Tackle Digest and the Official Gun Book are now available.** Both are published by Crown, sell for \$1.50 each.

## On the Orinoco...



Ore pours from a Link-Belt belt conveyor on the shiploading dock at Puerto Ordaz, Venezuela.

## on the Delaware...



Coal at Fairless moves on a belt conveyor equipped with long-lived Link-Belt idlers.



# Link-Belt helps U.S. Steel make history

ON the Orinoco River in Venezuela is the largest iron ore handling system ever built at one time. It carries Cerro Bolivar's iron ore from mine car terminal to ocean-going ships at a rate of up to 6000 long tons per hour. For this giant installation, U. S. Steel's Orinoco Mining Co. selected Link-Belt as the prime contractor. The resulting system provides modern flexible, low-cost handling. For example, one man in the unloading tower controls the ore's movement all the way from stockpiles to ship.

And on the Delaware River is the largest integrated steel mill ever built at one time—U. S. Steel's new Fairless Works. At this "dream mill"—ore, coal and coke are handled on belt conveyors equipped with Link-Belt idlers and speed reducers. Elsewhere throughout the mill, Link-Belt supplied other conveying and power transmission machinery.

Whether your job is large or small, you, too, will find it profitable to rely on Link-Belt. A call to the Link-Belt office near you will place the engineering and manufacturing facilities of this nation-wide organization at your service.



One source . . . one responsibility for materials  
handling and power transmission machinery

13,547

LINK-BELT COMPANY: Executive Offices, 307 N. Michigan Ave., Chicago 1, To Serve Industry There Are Link-Belt Plants and Sales Offices in All Principal Cities. Export Office, New York 7; Canada, Scarboro (Toronto 13); Australia, Sydney; South Africa, Springs. Representatives Throughout the World.

Dr. Arnold O. Beckman has already made a booming business out of his Beckman Instruments, Inc. Now he is setting his sights still higher. With his three young division chiefs (below), he is setting up an organization to supply complete control systems for automatic plants. He is . . .



## Counting on an Automatic Boom

Things are moving so fast right now for Dr. Arnold O. Beckman, president of Beckman Instruments, Inc. (cover and above), that even one of his own electronic computers might get out of breath keeping tally of the many things that are going on.

His company (1) delivered last week its 100,000th instrument in a market

the experts once said would be saturated at 600, (2) has its newest device, an automatic data converter, ready for the Esso laboratories in Baton Rouge, La., (3) is moving its main division to a brand new \$2-million factory at Fullerton, Calif., just outside Los Angeles, (4) is swinging its new German plant into production, and (5) is building up

an international sales division at the Munich headquarters.

• **Turning Point**—The German operation is the latest phase in a headlong growth that has expanded the company to the threefold operation represented by the division managers in the pictures below, and has jumped its sales from \$3-million in 1949 to \$16.4-million in



**DIVISION HEADS:** George Bruns, Jr., 34, leads Berkeley Div., latest of three.



**LONGEST** with Beckman is D. C. Duncan, 34, heading growing Helipot Div.



**YOUNGEST** is John F. Bishop, 30, managing original Beckman Instruments Div.

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Announcements—bulletins—self-mailers—drawings—forms—post cards—address labels—notices—menus—reports—price lists—diagrams—scripts. MODERN duplicating produces them all—up to 150 clear copies a minute. And everybody can run this new machine. Operating instructions are always in sight—mounted right on the machine with all controls clearly marked. Automatic trouble-free A. B. Dick feed handles post cards to legal size paper.

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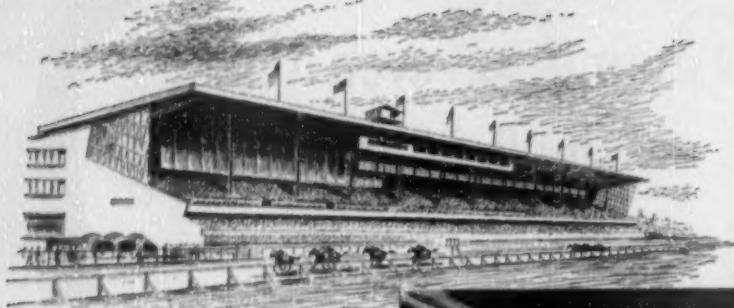
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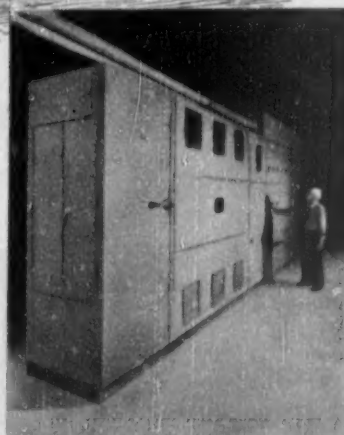
# THE WINNER AT LAUREL...

## FEDERAL NOARK® POWER CENTER



Federal Noark Power Center at Laurel Race Course... factory-assembled and tested, it assures positive, trouble-free performance... On the complete Laurel electrical system the Architect was Arthur Froehlich, Beverly Hills, Calif.; Contractor, Harry S. Mickey, Baltimore, Md.

IT TAKES ELECTRICITY to operate a race track. Without electricity you'd have trouble buying an admission ticket or placing a bet... and how could the horses get through the gates or give you a photofinish? Well, Laurel, in Maryland, is today's most modern track, and its electrical system is entirely controlled by Federal Noark equipment including lighting and power panels, motor controls, a control center and a unit substation.



### Today's top specification

Federal Noark equipment is today's best answer in buildings of every type and wherever else there's an electric light and power control problem. Most of this equipment is economically assembled from standard units to meet individual requirements. All of it cuts installation costs... and is designed for maximum efficiency, easy maintenance and complete flexibility for later changes or expansion.

### A full line... from smallest to largest

Design leadership throughout the whole range of control equipment for electric light and power has created a tremendous demand for Federal Noark products. Manufacturing facilities have had to be increased time after time and today 10 strategically-located Federal plants are serving the electrical industry the country over.

### FEDERAL ELECTRIC PRODUCTS COMPANY

Main Office: 50 PARIS STREET, NEWARK 5, N. J.

# FEDERAL NOARK



Plants at Newark, N. J.; Long Island City, N. Y.; Hartford, Conn.; Cleveland, Ohio; St. Louis, Mo.; Dallas County, Texas; Los Angeles, Calif.; San Francisco, Calif.; Santa Clara, Calif.  
Affiliated plant, Toronto, Canada.

its latest fiscal year (ended June 30, 1953).

But to Beckman, this tremendous hunk of expansion is only a first step toward the goal he has now set for his company. That's one reason he has picked young men to head his divisions. He's settling down to a "five year plan" for rounding out his product line, developing associated equipment and "missing links" in his over-all program. His object is to construct an organization equipped to supply complete control systems for the automatic factories he sees multiplying in the future.

In the past, the bulk of Beckman's devices were designed as laboratory instruments. Today, more and more of them go into factories as components of process controls. In the future, with automation bursting out all over, he says: "We will have to supply the whole system, either directly or indirectly. Our customers will want one person to do the whole job on control engineering, or at least to be responsible for it."

### I. Missionary Work

Beckman's German venture, launched this year, is an integral part of his expansion plan. What has made possible this coals-to-Newcastle operation is the application of electronics to instruments, which has put American companies far ahead in the field.

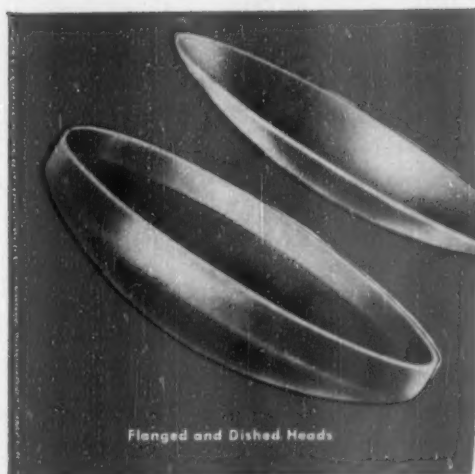
Beckman Instruments has always had sizable sales in Europe—over \$1-million a year currently. But Beckman decided to get a firm foothold in the German and European market before German manufacturers could catch up. He believes his overseas plant, operating on a small scale since February, will solve most of his export problems, enable him to compete abroad on better terms by lowering costs, and take advantage of the German pool of technical manpower.

• **Splurge**—To get the new venture off to a good start, Beckman put on a big exhibit last month at the German Industries Fair at Hanover. Set up in typical American merchandising style, the exhibit drew huge crowds—and the Munich office is still processing some 400 inquiries received. It was the first time many Europeans had seen some of the highly advanced American-made analytical instruments. (Beckman's was the only American exhibit in the Mechanics and Optics Building at the fair.)

Even before that, Beckman reports, his instruments were running a good race against their German competitors made by Zeiss—even though the Zeiss model of the quartz spectrophotometer, for example, sold at a lower price.

• **Wider Field**—Beckman has high hopes for his German venture, expects to sell half the output of the German

heads\*---you win



Flanged and Dished Heads

\*when they're made by

**CLAYMONT**

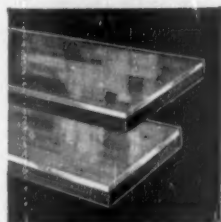
Whatever your needs in flanged and dished heads, you're a winner every time when you call for heads by Claymont.

We can always meet your most exacting specifications because with us the spinning of flanged and dished heads is more than just a job—it's an art into which we put the most painstaking care and specialized know-how.

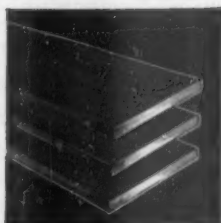
Our flanging department can supply you with flanged and dished heads in diameters from 9 inches to 19 feet and in gauges from 3/16-inch to 6 inches. Made in carbon steel, alloy steel or with stainless steel cladding. We are also prepared to handle head forming operations on both ferrous and non-ferrous metal circles supplied by the customer.

Other Claymont products include Stainless-Clad Steel Plates, Alloy and Carbon Steel Plates, Large Diameter Welded Steel Pipe.

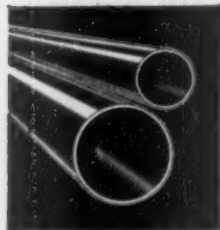
Write or call Claymont Steel Products Department, Wickwire Spencer Steel Division, Claymont, Delaware.



Stainless-Clad Steel Plates



Alloy and Carbon Steel Plates



Large Diameter Welded Steel Pipe

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THE COLORADO FUEL AND IRON CORPORATION



FINANCIAL AID TO HIGHER EDUCATION

# Our Colleges and Universities Face Grave Financial Problems

**F**or the past decade the nation's colleges and universities have been caught in a destructive financial squeeze. It is particularly destructive for the independent, privately endowed institutions. Unless extraordinary measures are taken to relieve this squeeze, it promises to become progressively worse. To let it do that is to court a national disaster.

This is the first of two editorials devoted to the financial plight of our colleges and universities. This first editorial deals with the character of the problem, present and potential. The second will indicate some things that need to be done about it, and particularly what American business might do.

## Enrollment Soars, Income Lags

In broad outline, the financial problem that afflicts our colleges and universities is simple. The demand for their services has increased rapidly, and promises to keep on increasing even more rapidly. At the same time, their financial capacity to provide these services has lagged behind, primarily because of price inflation.

Between 1940 and 1950, college and univer-

sity enrollment increased from approximately 1 $\frac{1}{3}$  million to 2 $\frac{1}{3}$  million—about 75 per cent. Over the same period, the educational income of these institutions, measured in terms of its actual purchasing power, increased only about 64 per cent. Thus, at the end of the decade, our colleges and universities as a group had, on the average, about 6 per cent less to spend per student than they had at the beginning. Meanwhile, the rapid advance of science and technology had made a good college or university course a much more expensive operation than it was in 1940. Since 1950, the latest date for which comprehensive figures are available, the financial squeeze on our colleges and universities has intensified, largely because of another wave of price inflation touched off by the Korean War.

Among the colleges and universities, the independent, privately endowed institutions are particularly hard pressed. In terms of actual purchasing power, the independent liberal arts colleges are now spending at least 20 per cent less per student than they spent in 1940. Public institutions of higher learning, supported out of tax revenues, have managed to increase slightly their expenditure per student. Otherwise, the financial squeeze on higher education as a whole would be even more severe.

## Why Independent Colleges Are Hit Hardest

The principal reason why the independent colleges and universities are so hard up is the shrinkage in their income from endowments. These endowments, created in other days by gifts of generous benefactors to help pay the expenses of higher education, have been hit hard from two directions. During the war and post-war years, the tax collector took so large a part of the incomes and estates of wealthy people that this source of endowments has been greatly reduced. Over the same period price inflation cut in half the purchasing power of the income derived from existing endowments. In 1940 income from endowments provided 26 per cent of the total income of the independent colleges and universities. By 1950 it provided only 14 per cent. The figure is still lower today.

The financial plight of the independent colleges and universities is directly reflected in the salary status of their teaching staffs. In mid-1952 a national survey showed that, after adjustment for the increased cost of living, the salaries of those holding full professorial rank in these institutions were 12 per cent lower than they were in 1941-42. Junior teachers, with the rank of instructor, fared somewhat better. In terms of actual purchasing power, their salaries declined only 2 per cent over the 12-year period, largely because there is more direct competition for their services from industry. Over the same period, the real wages of industrial workers increased 55 per cent.

## Time Will Not Provide a Cure

The plight of the colleges and universities, which is shared in some degree by all parts of our educational system, is not one that can be left to time for a cure. On the contrary, the financial problems of our institutions of higher learning will be intensified in the years ahead by the pressure of rapidly increasing enrollments. Present prospects indi-

cate that during the next decade college and university enrollment will increase by about one-third, or from 2 $\frac{1}{3}$  million to over 3 million. The problem of increased enrollments will become particularly acute toward the end of this decade when the babies born during the great surge of population in World War II are ready to enter college.

Such an increase in population as that now in prospect can be a tremendous asset to the nation. It is still a truth, even though it is worn a bit thin by frequent repetition at commencement exercises, that a nation has no resource more valuable than the education of its people. And the better the education, the more valuable the asset.

But to realize this, our colleges and universities must have the financial strength to handle the increased enrollments that face them in the years ahead. This means that we must relieve our independent colleges and universities, in particular, from the financial squeeze in which they are now caught and make them full partners in the economic well-being of the nation. Some of the means by which American business might help achieve this will be discussed in a second editorial.

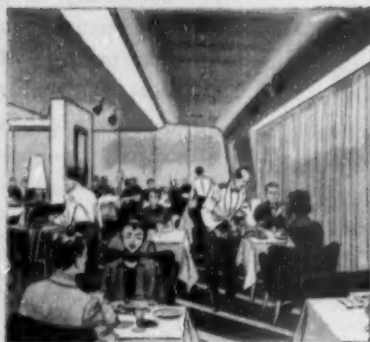
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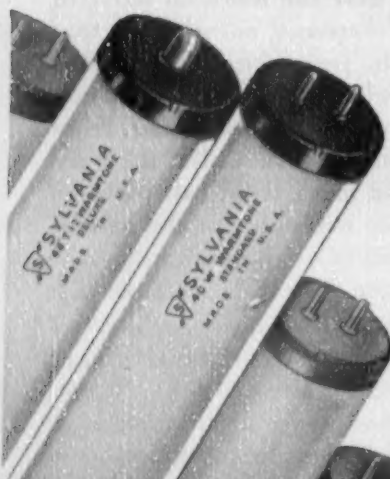
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plant right in West Germany. "German industries," he says, "particularly the fast-reviving chemical industry, are starved for instruments."

But he's taking a wider field for his target area. One of the reasons he built in Germany was to be able to sell instruments to foreign countries that can't pay in dollars or sterling but can pay in soft currency.

Only last week, one visiting distributor told Beckman's Munich representatives this was the first time since 1942 he could get a license to buy Beckman instruments—because now he could pay for them in soft currency.

## II. From Gadget to Necessity

Stepping up overseas operations is only one of Beckman's weapons for shooting at another doubling of sales in the next three years. The new \$2-million Fullerton plant into which he is moving the Beckman Instruments Div. (his original unit) has plenty of land room for a fourfold expansion.

In the past year, another unit, the Helipot Div., has increased its working space by acquiring a plant in Mountainside, N. J., opening another in San Gabriel, Calif., and taking over some of the buildings in Pasadena vacated in the Beckman Instruments Div. move. The production capacity of the third main unit, the Berkeley Div., in Richmond, Calif., was almost tripled.

• **In the Beginning**—All this is a long way from the shop in back of his home garage where Beckman started his instrument-making career 20 years ago.

That was in 1934, and Beckman was teaching at the California Institute of Technology in Pasadena. He hadn't the slightest intention at the time of going into business. All he did was to try to accommodate a friend by sketching a gadget to help the friend out.

The gimmick he designed was called a pH meter—an instrument for determining the degree of acidity or alkalinity in any solution. But then he couldn't find anyone who could build it, so he put it together himself. It turned out to be the first practical glass electrode pH meter; earlier ones had been fragile, but Beckman's was rugged enough to stand up in industrial processes. Beckman's pH meter met a wide commercial need, and he was launched in business.

• **Getting in Deeper**—In 1940 Beckman brought out his second instrument—his version of the quartz spectrophotometer. A spectrophotometer makes a chemical analysis of a sample, determining what substances are present in it and in what amounts. Its speed and accuracy put it far ahead of the laborious tests that were necessary before.

Again the timing helped. The country was vitamin-conscious, and the new



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
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### RHINELANDER

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"... replies to his ad overwhelmed him..."

BECKMAN starts on p. 178

device was immediately useful in measuring Vitamin A content.

Beckman now quit teaching to give all his time to business. This in spite of the estimate by chemical equipment dealers that 500 sales would be a 10-year ceiling for his pH meter, and 100 spectrophotometers would saturate the market.

• **Product No. 3**—It was also in 1940 that Beckman brought out the Helipot—that's short for helical potentiometer. A potentiometer measures mechanical energy or movement by translating it into electrical signals that mark out a curve on a graph. The Beckman "helical" type means it's shaped like a coiled spring or wire.

The Helipot was born in a world where radar was just growing up—and it proved to be a tool for increasing the accuracy of radar. The war also opened up a vast market for analog computers and other precision devices (page 90). The Helipot soon found a use as a component of many types of precision instruments. Demand mushroomed so much that Beckman set up a separate company to make Helipots. After the war, he almost closed it up, but decided to run an ad as a teaser to see if he could rouse some civilian interest. The replies overwhelmed him. Beckman discovered he had not only a market for his own instruments, but a fine bread-and-butter business in supplying Helipot components to other manufacturers of all types of instruments and controls in the rapidly growing industry.

• **Branching Out**—Two years ago, Beckman began working out his present organization by converting the Helipot company into a division of Beckman Instruments, Inc.

Also two years ago, Beckman purchased Berkeley Scientific Corp. and made it the Berkeley Div. of his company. Berkeley was a going concern in the field of digital or numerical computers (page 90), and was available for \$750,000. It gave Beckman an entry into the field cheaper than he could start from scratch—and a link for the automatic control chain he was already thinking of.

Berkeley's main product when Beckman took over was an electronic counter—one of those fabulous affairs that can count up to 200-million operations a second, and can also be used as a control device. Berkeley's counter, for example, is used at the Pittsburgh (Calif.) plant of the Columbia-Geneva Steel Div. of U. S. Steel Corp., to count off 1,232 sheets of steel as they are being

rapidly punched out, stop the operation, and send them to the dip tank.

With the new setup, Beckman still owns majority interest in the company, though a public offering of stock was made in 1952. Besides 1,079,735 shares of common, there is \$2.5-million in 4½% debentures.

### III. Base for Advance

The threefold division of his principal production units, Beckman figures, leaves them to operate pretty much on their own, and frees him for over-all strategy. He thinks it's a fairly firm base for further advance.

To spark the advance, he relies on three things: youth, flexibility, and sales push. True, the two men he has selected so far for his central coordinating staff are around his own age, which is 53. They are Joseph Fahey, vice-president and comptroller; and W. H. Steinkamp, vice-president and general sales manager.

But the division managers (pictures, page 178) were picked from the early-30-year-old group, Beckman says, to give the operating management vigor and long life.

• **Flexibility**—The Beckman flexibility shows up best in his handling of new products. He decided, for example, to go into making synchros—electromagnetic devices for transmitting a change at a central point to receiving instruments remotely located. He found a tremendous knowhow was needed, so he bought up a small company working in synchros just to get the knowhow.

Beckman set up another separate, small division (Shasta) for electrical test equipment. Finding that few people made a complete line of this equipment, he decided to make his the most complete of all, 25 to 30 instruments.

Beckman's latest device—his automatic data converter—takes information from 44 separate measuring instruments, such as pressure gauges, spectrometers, etc., and converts the graphic measurements into readable, numerical form.

• **Sales Push**—One big job of instrument companies, in the Beckman line-up, is to discern unsolved instrumentation and control problems, develop sound and marketable solutions, and sell managements on them.

Beckman is pushing this now from the selling angle. His distribution has been through a variety of outlets based on the different nature of his products—some through laboratory supply houses, some through manufacturers' representatives.

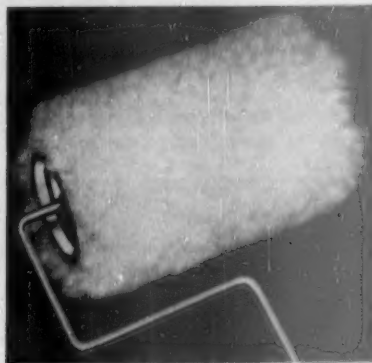
Last year he took on 21 young engineers to train as field representatives in key cities, educating and assisting supply salesmen and covering industrial companies for direct sales.

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## These Companies Looked Good in Recession

Company	1st Quarter Sales 1954 (000 omitted)	Percent Gain over Same Period in 1953	What Pepped Up Sales
Bell Aircraft Corp. Lockheed Aircraft Corp. Glenn L. Martin Co.	\$ 45,190 816,368 36,312	29.1% 36.7 22.2	The aircraft industry finally hit its stride early this year, after a long period of make-ready after Korea. But, with the air defense program showing signs of tapering off, the first-quarter performance may be the company's best.
North American Aviation, Inc. American Locomotive Co.	180,193 84,953	20.2 62.7	Company efforts to recuperate from strikes. North American had a 54-day strike last fall; at American Locomotive, several plants were closed by strikes early in 1953.
Perceptron Camera & Instrument Corp.	9,750	98.4	No comparison, since company was moving its plant to Syosser, L. I., during first quarter of 1953. But defense orders are holding up.
McGraw Electric Co.	34,916	24.3	More business. Higher capital investment being made by utilities industry, for which McGraw supplies appliances.
Minneapolis-Honeywell Regulator Co.	57,246	20.0	Continued defense orders, plus growing importance of instruments in electronics and other industries.
Ekco Products Co.	15,991	21.9	Acquisition of Autoyre Co., maker of bathroom fixtures; company also increased its defense orders.
Schick Inc.	4,629	28.6	Increased advertising, TV programs, new product introductions.
Crown Cork & Seal Co.	28,888	30.2	Heavy customer buying early in year, before second price increase in Crown bottle caps went into effect.
Hamilton Watch Co.	6,876	25.3	Defense orders held up, even though watch sales slowed down; also, company is diversifying.
Falstaff Brewing Corp.	13,440	34.6	A new plant at San Jose, Calif., opened up the West Coast market.

BUSINESS WEEK

## Some Companies Buck Trend

In a year when most companies thought they were doing fine just to match last year's figures, some companies leaped ahead. Here's a random sampling of those that did—and why.

The most direct route to higher volume apparently is the one paved with government contracts. That's the gist of a survey BUSINESS WEEK made of 13 companies (table) that reported substantial sales gains in the first quarter of this year over the same period in 1953.

To be sure, government outlays for defense and foreign aid have undergone some pruning in recent months. But spending for national security is still at

a \$47-billion annual clip—just \$6.5-billion below 1953's peak of \$53.5-billion.

In evaluating the first-quarter gains, however, you have to keep in mind that some defense-minded industries are just beginning to rev up after the post-Korea slump in the defense program. At Bell, for instance, where 95% of the sales volume is military, a spokesman says: "Our gains were due to increased production rates of programs that were initiated in 1952 and 1953."

You also have to remember that some of the companies' plants were strike-bound in early 1953, cutting production to below normal. In these cases, this year's gain isn't all gravy; a large

part of it constitutes normal sales. At American Locomotive, for example, high-level production of combat tanks helped counteract 1953's strikes; but the last tanks are scheduled to be completed before June 30. This could be reflected in lower production for the last half of this year.

Most nondefense businesses credited their sales gain to "more business," or to customers' laying in extra heavy inventories. Crown Cork & Seal's sales of Crown bottle caps were depressed in early 1953 due to a price increase; but many customers bought heavily early this year, anticipating another price hike late in January.

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## Exploring for Oil . . .



## . . . In Canada's Bogs

The strange vehicles in these pictures are called muskeg tractors. Muskeg is a sort of moss-covered bog land that covers much of northern Canada. It is too oozy to walk on or to drive an ordinary car or truck on, yet too solid to allow for boating. This unfriendly combination of properties has proved a source of acute frustration to oil companies, for there are thought to be vast deposits of petroleum beneath the muskeg lands.

The muskeg tractor, developed for Gulf Oil Corp., may solve the problem. The tractor's broad treads enable it to galumph through even the ooziest bogs, carrying men and equipment to places almost inaccessible before. Gulf Oil expects that the tractor will double or triple the speed of petroleum prospecting in the muskeg.

## COMPANIES BRIEFS

**Stockholders** of Sommerville Iron Works, Inc., of Chattanooga meet this week to consider an exchange of stock by which Tennessee Products & Chemical Corp. of Nashville would acquire the company. Sommerville makes cast iron soil pipe and fittings.

**Standard Industries, Inc.,** of Scranton, a holding company formerly known as Standard Brewery Co., took over Watson Elevator Co., Inc., which has plants in Englewood, N. J., Warsaw, N. Y.

**A former maker of storm fronts** for buggies and more recent maker of auto seat covers has given up. J. P. Gordon Co. of Columbus laid off its 110 employees and closed its doors. Two reasons: taxes and the new auto seat fabrics that need no covers.

**Two mine equipment companies merged:** Sanford-Day Iron Works of Knoxville, Tenn., and Brown-Fayro Co. of Johnstown, Pa. Brown-Fayro will operate as a division of Sanford-Day.

**American Locomotive Co.** plans to spend \$2.5-million in the next 18 months to improve its Schenectady plant—Alco has also absorbed a subsidiary, Beaumont Iron Works Co. of Beaumont, Tex., maker of oil field products, in a move to expand activity in that field.

**Eaton Mfg. Co.** of Cleveland reentered the aircraft component field by opening an aircraft division at Battle Creek, Mich., to make jet compressor blades. During the war, the company made parts for piston engines.

**Completion of a \$14-million titanium dioxide plant** at Savannah, Ga., is scheduled for the summer of 1955 by American Cyanamid Co.

**A 40% holding of the common stock** of Robbins Mills, Inc., textile manufacturer, has been sold by Karl Robbins, the company's board chairman. The company operates mills at Robbins, Red Springs, and Aberdeen, all in South Carolina. It has been losing money.

**Pulp from hardwood** will be produced at the new bleaching and pulping plant just started by Hammermill Paper Co. at Erie, Pa. The plant, which will cost \$5-million with its equipment, is expected to be in operation by the middle of next year. Hammermill will use its "Neutracer" process to handle hardwood from the 70,000 acres of timber that it owns within 200 miles of Erie.

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# Soul-Searching in Asia

It is doubtful if the U.S. has ever been confronted with a trickier diplomatic situation than the one that Indo-China has created in the past five months. No simple "either-or" solution fits the facts of this situation; it hasn't in the past and it doesn't now. The pressure from some groups in Congress for such a solution has merely compounded the difficulties President Eisenhower and Secretary of State Dulles have faced. This pressure has helped bring us to the point where there's a danger now that we may not only lose Indo-China but have an open split with France.

The fact is that in Indo-China the West has been operating from weakness. The Communists have had two great advantages there: (1) the existence of a genuine nationalist revolt against French colonialism, which could be mobilized in the interests of Moscow and Peking; and (2) the growing reluctance of the French nation to go on fighting for what most Frenchmen regard as a lost cause.

Soviet Foreign Minister Molotov has been exploiting these advantages for all they are worth—with the aim of expanding Communist control in Southeast Asia and, more important, of bringing on a political crisis in France that might force that country out of the North Atlantic Treaty Organization. The crisis in France has now reached a point where Molotov will have a chance of achieving both goals unless Washington decides on a firm policy.

For the Administration and for the American people it has become a case now of putting first things first and not asking any longer for what's impossible.

The main thing that the U.S. is trying to do at Geneva now is prevent a French capitulation. And to do that we must be prepared to make a compromise settlement—if the Communists are ready to sign an agreement that would not lead to complete Communist conquest of Indo-China. If Moscow and Peking won't agree to that and the French capitulate, then Dulles' job is twofold—to save the rest of Southeast Asia via a NATO-like mutual security pact in the area and at the same time keep France from going completely neutralist in the East-West struggle.

It may be that French morale is so badly cracked that Dulles can't achieve the second objective. The collapse of France as an ally has been a possibility, and one over which we can have no final control, ever since the end of World War II. But it is within our power to save Southeast Asia if, as a nation, we are prepared to adopt our diplomacy and our military strategy to whatever happens in Indo-China.

Until the solution in Paris crystallizes, and with it the situation in Geneva, there's no telling exactly what the requirements of a new policy will be. But whether we then face an uneasy truce in Indo-China (with most of

the odds on the Communist side), or the need for immediate American intervention, or a French capitulation that leaves the U.S. and the British Commonwealth holding a new line in Southeast Asia, there are certain things we should have learned to our profit from the experience of the past few months:

(1) The U.S. Secretary of State is in an impossible position at a conference like Geneva if he can neither negotiate or fight. Largely because of division in the Republican Party, Dulles was in this position at Geneva—though it should have been clear from the start that we would have to let the French seek a compromise in Indo-China, as the U.S. did in Korea, unless we were prepared to take over the fighting there.

(2) Western nations, including the U.S., were far too slow in appreciating the strength of the new nationalism in Southeast Asia—as it applies to the demand both for complete national independence and for much greater independence of the area as a whole from Western influence. Until recently U.S. support for France in Indo-China has identified us with French colonialism. Equally, we have been identified, though for good military reasons, with Chiang's Nationalist government on Formosa, which most Southeast Asians regard as a bankrupt regime. Despite Senator Knowland's protests Dulles wisely has not tried to include Formosa in the proposed Southeast Asia NATO. In the end we may have to try to link India to the defense pact, little as that prospect appeals to most Americans today.

(3) Our position in Southeast Asia would be stronger today if we had done more in the past two or three years to build up the area economically. Almost certainly we will have to take on new economic as well as new military commitments in Southeast Asia. And a new aid approach may be necessary, something as revolutionary in conception as the Marshall Plan. The methods of near-economic orthodoxy that are working so well in Western Europe today will apply in Southeast Asia at this stage even less than they could have in the early period of European reconstruction.

Apart from exploring these possibilities, the most important thing is not to repeat the errors of the past, the mistake that Britain made in 1914 and again in 1939, the mistake we made in 1950. We must not allow our enemies—and our friends—to get the impression that we are not prepared to protect our vital interests when threatened.

What President Eisenhower and Secretary of State Dulles need now is the full backing of Congress and the American people for firm action to check the Communist advance in Southeast Asia. Coupled with diplomatic flexibility, this might lead to a compromise settlement in Indo-China. If not, we must face the prospect, however disagreeable, of military action in Southeast Asia.



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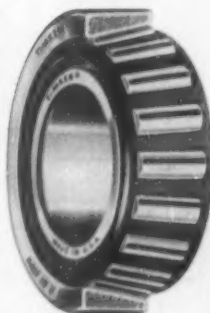
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